
**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 September 30, 2016
Commission File Number 001-14951

FARMER  AC

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, D.C.

20006

(Address of principal executive offices)

(Zip code)

(202) 872-7700

(Registrant's telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files).

Yes ☒ No ☐

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>

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 November 1, 2016, the registrant had outstanding 1,030,780 shares of Class A Voting Common Stock, 500,301 shares of Class B Voting Common Stock and 8,952,481 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	
	September 30, 2016	December 31, 2015
	(in thousands)	
Assets:		
Cash and cash equivalents	\$ 313,581	\$ 1,210,084
Investment securities:		
Available-for-sale, at fair value	3,001,185	2,775,025
Trading, at fair value	—	491
Total investment securities	3,001,185	2,775,516
Farmer Mac Guaranteed Securities:		
Available-for-sale, at fair value	4,937,481	4,152,605
Held-to-maturity, at amortized cost	1,153,646	1,274,016
Total Farmer Mac Guaranteed Securities	6,091,127	5,426,621
USDA Securities:		
Available-for-sale, at fair value	1,980,327	1,888,344
Trading, at fair value	23,489	28,975
Total USDA Securities	2,003,816	1,917,319
Loans:		
Loans held for investment, at amortized cost	3,299,618	3,258,413
Loans held for investment in consolidated trusts, at amortized cost	1,039,770	708,111
Allowance for loan losses	(4,954)	(4,480)
Total loans, net of allowance	4,334,434	3,962,044
Real estate owned, at lower of cost or fair value	1,528	1,369
Financial derivatives, at fair value	4,627	3,816
Interest receivable (includes \$7,683 and \$7,938, respectively, related to consolidated trusts)	86,699	112,700
Guarantee and commitment fees receivable	39,655	40,189
Deferred tax asset, net	29,187	42,916
Prepaid expenses and other assets	95,066	47,780
Total Assets	\$ 16,000,905	\$ 15,540,354
Liabilities and Equity:		
Liabilities:		
Notes payable:		
Due within one year	\$ 9,295,700	\$ 9,111,461
Due after one year	4,820,388	4,967,036
Total notes payable	14,116,088	14,078,497
Debt securities of consolidated trusts held by third parties	1,044,559	713,536
Financial derivatives, at fair value	123,796	77,199
Accrued interest payable (includes \$6,487 and \$6,705, respectively, related to consolidated trusts)	40,270	47,621
Guarantee and commitment obligation	37,764	38,609
Accounts payable and accrued expenses	35,575	29,089
Reserve for losses	1,969	2,083
Total Liabilities	15,400,021	14,986,634
Commitments and Contingencies (Note 6)		
Equity:		
Preferred stock:		
Series A, par value \$25 per share, 2,400,000 shares authorized, issued and outstanding	58,333	58,333
Series B, par value \$25 per share, 3,000,000 shares authorized, issued and outstanding	73,044	73,044
Series C, par value \$25 per share, 3,000,000 shares authorized, issued and outstanding	73,382	73,382
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, 8,949,511 shares and 9,155,661 shares outstanding, respectively	8,950	9,156
Additional paid-in capital	118,897	117,862
Accumulated other comprehensive income/(loss), net of tax	13,564	(11,019)
Retained earnings	252,989	231,228
Total Stockholders' Equity	600,690	553,517
Non-controlling interest	194	203
Total Equity	600,884	553,720
Total Liabilities and Equity	\$ 16,000,905	\$ 15,540,354

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 Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	<i>(in thousands, except per share amounts)</i>			
Interest income:				
Investments and cash equivalents	\$ 6,994	\$ 3,185	\$ 20,235	\$ 9,144
Farmer Mac Guaranteed Securities and USDA Securities	38,129	34,002	110,938	101,608
Loans	34,409	29,731	99,486	86,509
Total interest income	79,532	66,918	230,659	197,261
Total interest expense	43,969	34,735	127,098	102,425
Net interest income	35,563	32,183	103,561	94,836
(Provision for)/release of loan losses	(191)	1,164	(604)	978
Net interest income after (provision for)/release of loan losses	35,372	33,347	102,957	95,814
Non-interest income/(loss):				
Guarantee and commitment fees	3,798	3,532	11,079	10,297
(Losses)/gains on financial derivatives and hedging activities	(1,601)	(9,568)	(13,079)	939
Gains/(losses) on trading securities	1,182	(8)	1,934	524
Gains/(losses) on sale of available-for-sale investment securities	—	3	(9)	9
Gains/(losses) on sale of real estate owned	15	—	15	(1)
Other income	707	1,060	1,221	1,933
Non-interest income/(loss)	4,101	(4,981)	1,161	13,701
Non-interest expense:				
Compensation and employee benefits	5,438	5,236	16,823	16,662
General and administrative	3,474	3,676	10,757	9,873
Regulatory fees	613	600	1,838	1,800
Real estate owned operating costs, net	—	48	39	47
(Release of)/provision for reserve for losses	(222)	861	(114)	1,235
Non-interest expense	9,303	10,421	29,343	29,617
Income before income taxes	30,170	17,945	74,775	79,898
Income tax expense	10,529	6,327	26,264	24,327
Net income	19,641	11,618	48,511	55,571
Less: Net loss/(income) attributable to non-controlling interest	18	36	62	(5,199)
Net income attributable to Farmer Mac	19,659	11,654	48,573	50,372
Preferred stock dividends	(3,295)	(3,295)	(9,886)	(9,886)
Loss on retirement of preferred stock	—	—	—	(8,147)
Net income attributable to common stockholders	\$ 16,364	\$ 8,359	\$ 38,687	\$ 32,339
Earnings per common share and dividends:				
Basic earnings per common share	\$ 1.56	\$ 0.76	\$ 3.70	\$ 2.94
Diluted earnings per common share	\$ 1.54	\$ 0.74	\$ 3.60	\$ 2.85
Common stock dividends per common share	\$ 0.26	\$ 0.16	\$ 0.78	\$ 0.48

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 Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	<i>(in thousands)</i>			
Net income	\$ 19,641	\$ 11,618	\$ 48,511	\$ 55,571
Other comprehensive income/(loss) before taxes:				
Net unrealized gains/(losses) on available-for sale securities	552	(56,949)	46,305	(40,363)
Net changes in held-to-maturity securities	(73)	(2,236)	(2,081)	(8,930)
Net unrealized gains/(losses) on cash flow hedges	1,336	(3,195)	(6,403)	(2,012)
Other comprehensive income/(loss) before tax	1,815	(62,380)	37,821	(51,305)
Income tax (expense)/benefit related to other comprehensive income	(635)	21,833	(13,238)	17,958
Other comprehensive income/(loss), net of tax	1,180	(40,547)	24,583	(33,347)
Comprehensive income/(loss)	20,821	(28,929)	73,094	22,224
Less: comprehensive loss/(income) attributable to non-controlling interest	18	36	62	(5,199)
Comprehensive income/(loss) attributable to Farmer Mac	\$ 20,839	\$ (28,893)	\$ 73,156	\$ 17,025

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	Non-controlling Interest	Total Equity
	Shares	Amount	Shares	Amount					
<i>(in thousands)</i>									
Balance as of December 31, 2014	8,400	\$204,759	10,937	\$ 10,937	\$ 113,559	\$ 15,533	\$ 201,013	\$ 236,028	\$ 781,829
Net income/(loss):									
Attributable to Farmer Mac	—	—	—	—	—	—	50,372	—	50,372
Attributable to non-controlling interest	—	—	—	—	—	—	—	(155)	(155)
Other comprehensive loss, net of tax	—	—	—	—	—	(33,347)	—	—	(33,347)
Cash dividends:									
Preferred stock	—	—	—	—	—	—	(9,886)	—	(9,886)
Common stock	—	—	—	—	—	—	(5,280)	—	(5,280)
Issuance of Class C Common Stock	—	—	110	110	10	—	—	—	120
Repurchase of Class C Common Stock	—	—	(104)	(104)	—	—	(2,686)	—	(2,790)
Stock-based compensation cost	—	—	—	—	2,457	—	—	—	2,457
Other stock-based award activity	—	—	—	—	1,051	—	—	—	1,051
Investment in subsidiary - non-controlling interest	—	—	—	—	—	—	—	175	175
Redemption of Farmer Mac II LLC preferred stock	—	—	—	—	—	—	(8,147)	(235,853)	(244,000)
Balance as of September 30, 2015	<u>8,400</u>	<u>\$204,759</u>	<u>10,943</u>	<u>\$ 10,943</u>	<u>\$ 117,077</u>	<u>\$ (17,814)</u>	<u>\$ 225,386</u>	<u>\$ 195</u>	<u>\$ 540,546</u>
Balance as of December 31, 2015	8,400	\$204,759	10,687	\$ 10,687	\$ 117,862	\$ (11,019)	\$ 231,228	\$ 203	\$ 553,720
Net income/(loss):									
Attributable to Farmer Mac	—	—	—	—	—	—	48,573	—	48,573
Attributable to non-controlling interest	—	—	—	—	—	—	—	(62)	(62)
Other comprehensive income, net of tax	—	—	—	—	—	24,583	—	—	24,583
Cash dividends:									
Preferred stock	—	—	—	—	—	—	(9,886)	—	(9,886)
Common stock	—	—	—	—	—	—	(8,145)	—	(8,145)
Issuance of Class C Common Stock	—	—	101	101	23	—	—	—	124
Repurchase of Class C Common Stock	—	—	(307)	(307)	—	—	(8,781)	—	(9,088)
Stock-based compensation cost	—	—	—	—	2,565	—	—	—	2,565
Other stock-based award activity	—	—	—	—	(1,553)	—	—	—	(1,553)
Investment in subsidiary - non-controlling interest	—	—	—	—	—	—	—	53	53
Balance as of September 30, 2016	<u>8,400</u>	<u>\$204,759</u>	<u>10,481</u>	<u>\$ 10,481</u>	<u>\$ 118,897</u>	<u>\$ 13,564</u>	<u>\$ 252,989</u>	<u>\$ 194</u>	<u>\$ 600,884</u>

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 Nine Months Ended	
	September 30, 2016	September 30, 2015
	<i>(in thousands)</i>	
Cash flows from operating activities:		
Net income	\$ 48,511	\$ 55,571
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	1,343	2,199
Amortization of debt premiums, discounts and issuance costs	24,789	9,601
Net change in fair value of trading securities, hedged assets, and financial derivatives	1,672	(8,705)
Losses/(gains) on sale of available-for-sale investment securities	9	(9)
(Gains)/losses on sale of real estate owned	(15)	1
Total provision for losses	490	257
Deferred income taxes	(1,270)	2,182
Stock-based compensation expense	2,565	2,457
Proceeds from repayment of trading investment securities	2,212	544
Proceeds from repayment of loans purchased as held for sale	67,506	82,864
Net change in:		
Interest receivable	26,172	32,911
Guarantee and commitment fees receivable	534	(698)
Other assets	(46,832)	(2,369)
Accrued interest payable	(7,351)	(10,525)
Other liabilities	(1,468)	(864)
Net cash provided by operating activities	118,867	165,417
Cash flows from investing activities:		
Purchases of available-for-sale investment securities	(1,365,314)	(1,282,474)
Purchases of Farmer Mac Guaranteed Securities and USDA Securities	(2,203,574)	(1,093,737)
Purchases of loans held for investment	(762,018)	(565,829)
Purchases of defaulted loans	(2,516)	(2,244)
Proceeds from repayment of available-for-sale investment securities	957,973	1,111,093
Proceeds from repayment of Farmer Mac Guaranteed Securities and USDA Securities	1,467,052	901,327
Proceeds from repayment of loans purchased as held for investment	333,920	248,989
Proceeds from sale of available-for-sale investment securities	186,769	83,735
Proceeds from sale of Farmer Mac Guaranteed Securities	457,369	231,242
Payments from sale of real estate owned	295	(1)
Net cash used in investing activities	(930,044)	(367,899)
Cash flows from financing activities:		
Proceeds from issuance of discount notes	77,411,229	68,066,267
Proceeds from issuance of medium-term notes	4,763,631	3,406,037
Payments to redeem discount notes	(79,058,129)	(66,933,948)
Payments to redeem medium-term notes	(3,103,800)	(3,875,715)
Excess tax benefits related to stock-based awards	408	154
Payments to third parties on debt securities of consolidated trusts	(71,806)	(42,449)
Proceeds from common stock issuance	405	1,685
Common stock repurchased	(9,286)	(1,994)
Investment in subsidiary - non-controlling interest	53	175
Redemption of Farmer Mac II LLC Preferred Stock	—	(244,000)
Dividends paid - Non-controlling interest - preferred stock	—	(5,415)
Dividends paid on common and preferred stock	(18,031)	(15,166)
Net cash (used)/provided by financing activities	(85,326)	355,631
Net (decrease)/increase in cash and cash equivalents	(896,503)	153,149
Cash and cash equivalents at beginning of period	1,210,084	1,363,387
Cash and cash equivalents at end of period	\$ 313,581	\$ 1,516,536

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

FEDERAL AGRICULTURAL MORTGAGE CORPORATION AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

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, 2015 consolidated balance sheet presented in this report has been derived from Farmer Mac's audited 2015 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 2015 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, 2015 filed with the SEC on March 10, 2016. That Form 10-K describes Farmer Mac's significant accounting policies, which include its policies on Principles of Consolidation; Cash and Cash Equivalents and Statements of Cash Flows; Transfers of Financial Assets and Liabilities; Investment Securities, Farmer Mac Guaranteed Securities, and USDA Securities; Loans; Securitization of Loans; Real Estate Owned; Financial Derivatives; Notes Payable; Allowance for Loan Losses and Reserve for Losses; Earnings Per Common Share; Income Taxes; Stock-Based Compensation; Comprehensive Income; Long-Term Standby Purchase Commitments; Fair Value Measurement; and Consolidation of Variable Interest Entities ("VIEs"). 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 nine months ended September 30, 2016.

Principles of Consolidation

The consolidated financial statements include the accounts of Farmer Mac and its three subsidiaries: (1) Farmer Mac Mortgage Securities Corporation ("FMMS"), whose principal activities are to facilitate the purchase and issuance of Farmer Mac Guaranteed Securities; (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; and (3) Contour Valuation Services, LLC (which began doing business as AgVisory during first quarter 2016), whose principal activity is to appraise agricultural real estate. The consolidated financial statements also include the accounts of VIEs in which Farmer Mac determined itself to be the primary beneficiary.

The following tables present, by line of business, details about the consolidation of VIEs:

Table 1.1

Consolidation of Variable Interest Entities							
As of September 30, 2016							
Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Total		
(in thousands)							
On-Balance Sheet:							
Consolidated VIEs:							
Loans held for investment in consolidated trusts, at amortized cost	\$ 1,039,770	\$ —	\$ —	\$ —	\$ —	\$ 1,039,770	
Debt securities of consolidated trusts held by third parties ⁽¹⁾	1,044,559	—	—	—	—	1,044,559	
Unconsolidated VIEs:							
Farmer Mac Guaranteed Securities:							
Carrying value ⁽²⁾	—	32,824	—	30,666	—	63,490	
Maximum exposure to loss ⁽³⁾	—	32,364	—	30,000	—	62,364	
Investment securities:							
Carrying value ⁽⁴⁾	—	—	—	—	758,066	758,066	
Maximum exposure to loss ^{(3) (4)}	—	—	—	—	756,693	756,693	
Off-Balance Sheet:							
Unconsolidated VIEs:							
Farmer Mac Guaranteed Securities:							
Maximum exposure to loss ^{(3) (5)}	441,417	61,054	—	970,000	—	1,472,471	

⁽¹⁾ Includes borrower remittances of \$4.8 million. The borrower remittances have not been passed through to third party investors as of September 30, 2016.

⁽²⁾ Includes \$0.5 million of unamortized premiums and discounts and fair value adjustments related to the USDA Guarantees line of business. Includes fair value adjustments related to the Institutional Credit line of business of \$0.7 million.

⁽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.

- ⁽¹⁾ Includes borrower remittances of \$4.8 million. The borrower remittances have not been passed through to third party investors as of September 30, 2016.
- ⁽²⁾ Includes \$0.5 million of unamortized premiums and discounts and fair value adjustments related to the USDA Guarantees line of business. Includes fair value adjustments related to the Institutional Credit line of business of \$0.7 million.
- ⁽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.

Consolidation of Variable Interest Entities						
As of December 31, 2015						
Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Total	
(in thousands)						
On-Balance Sheet:						
Consolidated VIEs:						
Loans held for investment in consolidated trusts, at amortized cost	\$ 708,111	\$ —	\$ —	\$ —	\$ —	\$ 708,111
Debt securities of consolidated trusts held by third parties ⁽¹⁾	713,536	—	—	—	—	713,536
Unconsolidated VIEs:						
Farmer Mac Guaranteed Securities:						
Carrying value ⁽²⁾	—	31,360	—	31,400	—	62,760
Maximum exposure to loss ⁽³⁾	—	31,553	—	30,000	—	61,553
Investment securities:						
Carrying value ⁽⁴⁾	—	—	—	—	917,292	917,292
Maximum exposure to loss ^{(3) (4)}	—	—	—	—	918,121	918,121
Off-Balance Sheet:						
Unconsolidated VIEs:						
Farmer Mac Guaranteed Securities:						
Maximum exposure to loss ^{(3) (5)}	514,051	10,272	—	970,000	—	1,494,323

⁽¹⁾ Includes borrower remittances of \$5.4 million, which have not been passed through to third party investors as of December 31, 2015.

⁽²⁾ Includes \$0.2 million of unamortized premiums and discounts and fair value adjustments related to the USDA Guarantees line of business. Includes fair value adjustments related to the Institutional Credit line of business of \$1.4 million.

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

⁽⁴⁾ Includes auction-rate certificates, asset-backed securities, and 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) Statements of Cash Flows

The following table sets forth information regarding certain non-cash transactions for the nine months ended September 30, 2016 and 2015:

Table 1.2

	For the Nine Months Ended	
	September 30, 2016	September 30, 2015
<i>(in thousands)</i>		
Non-cash activity:		
Loans acquired and securitized as Farmer Mac Guaranteed Securities	\$ 457,369	\$ 231,242
Consolidation of Farm & Ranch 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	402,841	231,242
Purchases of securities - traded, not yet settled	25,000	15,000
Issuance costs on the retirement of Farmer Mac II LLC Preferred Stock	—	8,147
Unsettled common stock repurchases	—	796

(b) Earnings Per Common Share

Basic earnings per common share ("EPS") is based on the weighted-average number of shares of common stock outstanding. Diluted earnings per common share is based on the weighted-average number of shares of common stock outstanding adjusted to include all potentially dilutive common stock options, stock appreciation rights ("SARs"), and non-vested restricted stock awards. The following schedule reconciles basic and diluted EPS for three and nine months ended September 30, 2016 and 2015:

Table 1.3

	For the Three Months Ended					
	September 30, 2016			September 30, 2015		
	Net Income	Weighted- Average Shares	\$ per Share	Net Income	Weighted- Average Shares	\$ per Share
	<i>(in thousands, except per share amounts)</i>					
Basic EPS						
Net income attributable to common stockholders	\$ 16,364	10,473	\$ 1.56	\$ 8,359	11,028	\$ 0.76
Effect of dilutive securities⁽¹⁾						
Stock options, SARs and restricted stock	—	176	(0.02)	—	243	(0.02)
Diluted EPS	<u>\$ 16,364</u>	<u>10,649</u>	<u>\$ 1.54</u>	<u>\$ 8,359</u>	<u>11,271</u>	<u>\$ 0.74</u>

⁽¹⁾ For the three months ended September 30, 2016 and 2015, stock options and SARs of 54,709 and 476,699, 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 September 30, 2016 and 2015, contingent shares of non-vested restricted stock of 37,284 and 45,034, 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 Nine Months Ended					
	September 30, 2016			September 30, 2015		
	Net Income	Weighted- Average Shares	\$ per Share	Net Income	Weighted- Average Shares	\$ per Share
	<i>(in thousands, except per share amounts)</i>					
Basic EPS						
Net income attributable to common stockholders	\$ 38,687	10,464	\$ 3.70	\$ 32,339	10,992	\$ 2.94
Effect of dilutive securities⁽¹⁾						
Stock options, SARs and restricted stock	—	291	(0.10)	—	355	(0.09)
Diluted EPS	<u>\$ 38,687</u>	<u>10,755</u>	<u>\$ 3.60</u>	<u>\$ 32,339</u>	<u>11,347</u>	<u>\$ 2.85</u>

⁽¹⁾ For the nine months ended September 30, 2016 and 2015, stock options and SARs of 115,875 and 302,598, respectively, were outstanding but not included in the computation of diluted earnings per share of common stock because they were anti-dilutive. For the nine months ended September 30, 2016 and 2015, contingent shares of non-vested restricted stock of 37,284 and 40,194, 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.

(c) 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 nine months ended September 30, 2016 and 2015:

Table 1.4

	As of September 30, 2016				As of September 30, 2015			
	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	\$ 19,704	\$ (1,781)	\$ (5,539)	\$ 12,384	\$ 20,498	\$ 1,622	\$ 613	\$ 22,733
Other comprehensive income/(loss) before reclassifications	2,746	—	527	3,273	(33,392)	—	(2,347)	(35,739)
Amounts reclassified from AOCI	(2,388)	(47)	342	(2,093)	(3,624)	(1,454)	270	(4,808)
Net other comprehensive income/(loss)	358	(47)	869	1,180	(37,016)	(1,454)	(2,077)	(40,547)
Ending Balance	<u>\$ 20,062</u>	<u>\$ (1,828)</u>	<u>\$ (4,670)</u>	<u>\$ 13,564</u>	<u>\$ (16,518)</u>	<u>\$ 168</u>	<u>\$ (1,464)</u>	<u>\$ (17,814)</u>
For the Nine Months Ended								
Beginning Balance	\$ (10,035)	\$ (476)	\$ (508)	\$ (11,019)	\$ 9,716	\$ 5,973	\$ (156)	\$ 15,533
Other comprehensive income/(loss) before reclassifications	37,446	—	(5,136)	32,310	(15,985)	—	(1,814)	(17,799)
Amounts reclassified from AOCI	(7,349)	(1,352)	974	(7,727)	(10,249)	(5,805)	506	(15,548)
Net other comprehensive income/(loss)	30,097	(1,352)	(4,162)	24,583	(26,234)	(5,805)	(1,308)	(33,347)
Ending Balance	<u>\$ 20,062</u>	<u>\$ (1,828)</u>	<u>\$ (4,670)</u>	<u>\$ 13,564</u>	<u>\$ (16,518)</u>	<u>\$ 168</u>	<u>\$ (1,464)</u>	<u>\$ (17,814)</u>

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 nine months ended September 30, 2016 and 2015:

Table 1.5

	For the Three Months Ended					
	September 30, 2016			September 30, 2015		
	Before Tax	Provision (Benefit)	After Tax	Before Tax	Provision (Benefit)	After Tax
	<i>(in thousands)</i>					
Other comprehensive income/(loss):						
Available-for-sale-securities:						
Unrealized holding gains/(losses) on available-for-sale-securities	\$ 4,225	\$ 1,479	\$ 2,746	\$ (51,373)	\$ (17,981)	\$ (33,392)
Less reclassification adjustments included in:						
(Losses)/gains on financial derivatives and hedging activities ⁽¹⁾	(3,652)	(1,278)	(2,374)	(5,038)	(1,763)	(3,275)
Gains/(losses) on sale of available-for-sale investment securities ⁽²⁾	—	—	—	(4)	(2)	(2)
Other income ⁽³⁾	(21)	(7)	(14)	(534)	(187)	(347)
Total	\$ 552	\$ 194	\$ 358	\$ (56,949)	\$ (19,933)	\$ (37,016)
Held-to-maturity securities:						
Less reclassification adjustments included in:						
Net interest income ⁽⁴⁾	\$ (73)	\$ (26)	\$ (47)	\$ (2,236)	\$ (782)	\$ (1,454)
Total	\$ (73)	\$ (26)	\$ (47)	\$ (2,236)	\$ (782)	\$ (1,454)
Cash flow hedges						
Unrealized gains/(losses) on cash flow hedges	\$ 810	\$ 283	\$ 527	\$ (3,611)	\$ (1,264)	\$ (2,347)
Less reclassification adjustments included in:						
Net interest income ⁽⁵⁾	526	184	342	416	146	270
Total	\$ 1,336	\$ 467	\$ 869	\$ (3,195)	\$ (1,118)	\$ (2,077)
Other comprehensive income/(loss)	\$ 1,815	\$ 635	\$ 1,180	\$ (62,380)	\$ (21,833)	\$ (40,547)

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

⁽²⁾ Represents unrealized gains and losses on sales of available-for-sale investment securities.

⁽³⁾ Represents amortization of deferred gains related to certain available-for-sale USDA Securities and Farmer Mac Guaranteed USDA Securities.

⁽⁴⁾ 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.

⁽⁵⁾ Relates to the recognition of unrealized gains and losses on cash flow hedges recorded in AOCI.

	For the Nine Months Ended					
	September 30, 2016			September 30, 2015		
	Before Tax	Provision (Benefit)	After Tax	Before Tax	Provision (Benefit)	After Tax
	(in thousands)					
Other comprehensive income:						
Available-for-sale securities:						
Unrealized holding gains on available-for-sale securities	\$ 57,610	\$ 20,164	\$ 37,446	\$ (24,594)	\$ (8,609)	\$ (15,985)
Less reclassification adjustments included in:						
(Losses)/gains on financial derivatives and hedging activities ⁽¹⁾	(11,591)	(4,056)	(7,535)	(14,852)	(5,198)	(9,654)
Gains/(losses) on sale of available-for-sale investment securities ⁽²⁾	9	3	6	(10)	(5)	(5)
Other income ⁽³⁾	277	97	180	(907)	(317)	(590)
Total	\$ 46,305	\$ 16,208	\$ 30,097	\$ (40,363)	\$ (14,129)	\$ (26,234)
Held-to-maturity securities:						
Net interest income ⁽⁴⁾	\$ (2,081)	\$ (729)	\$ (1,352)	\$ (8,930)	\$ (3,125)	\$ (5,805)
Total	\$ (2,081)	\$ (729)	\$ (1,352)	\$ (8,930)	\$ (3,125)	\$ (5,805)
Cash flow hedges						
Unrealized (losses)/gains on cash flow hedges	\$ (7,901)	\$ (2,765)	\$ (5,136)	\$ (2,791)	\$ (977)	\$ (1,814)
Less reclassification adjustments included in:						
Net interest income ⁽⁵⁾	1,498	524	974	779	273	506
Total	\$ (6,403)	\$ (2,241)	\$ (4,162)	\$ (2,012)	\$ (704)	\$ (1,308)
Other comprehensive income	\$ 37,821	\$ 13,238	\$ 24,583	\$ (51,305)	\$ (17,958)	\$ (33,347)

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

⁽²⁾ Represents unrealized gains and losses on sales of available-for-sale investment securities.

⁽³⁾ Represents amortization of deferred gains related to certain available-for-sale USDA Securities and Farmer Mac Guaranteed USDA Securities.

⁽⁴⁾ 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.

⁽⁵⁾ Relates to the recognition of unrealized gains and losses on cash flow hedges recorded in AOCI.

(d) New Accounting Standards

In January 2016, the FASB issued Accounting Standards Update ("ASU") 2016-01, *"Recognition and Measurement of Financial Assets and Financial Liabilities,"* which amends the guidance in GAAP on the classification and measurement of financial instruments. The ASU significantly revises an entity's accounting related to (1) the classification and measurement of investments in equity securities and (2) the presentation of certain fair value changes for financial liabilities measured at fair value. The ASU also amends certain disclosure requirements associated with the fair value of financial instruments. The new standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2017. Farmer Mac does not expect that adoption of the new guidance will have a material effect on Farmer Mac's financial position, results of operations, or cash flows.

In February 2016, the FASB issued ASU 2016-02, *"Leases,"* which provides new guidance intended to improve financial reporting about leasing transactions. The ASU will require organizations that lease assets to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. The ASU also will require disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. The new standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2018. Farmer Mac does not expect that adoption of the new guidance will have a material effect on Farmer Mac's financial position, results of operations, or cash flows.

In March 2016, the FASB issued ASU 2016-09, "*Improvements to Employee Share-Based Payment Accounting*," which provides new guidance intended to simplify several aspects of accounting for employee share-based payment transactions including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The new standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2016. Farmer Mac does not expect that adoption of the new guidance will have a material effect on Farmer Mac's financial position, results of operations, or cash flows.

In June 2016, the FASB issued ASU 2016-13, "*Financial Instruments—Credit Losses*," which will require entities to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. Entities will be required to use forward-looking information to form their credit loss estimates. The ASU will also require enhanced disclosures to help users of financial statements better understand significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an entity's portfolio. The new standard is effective for fiscal years and interim periods within those fiscal years, beginning after December 15, 2019. Early application will be permitted for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Farmer Mac is currently evaluating the impact of adopting the new guidance on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "*Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force)*," which amends the existing guidance to add or clarify current guidance in GAAP on the classification of certain cash receipts and payments in the statement of cash flows to reduce diversity in practice in how certain transactions are classified. The new standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2017. Farmer Mac does not expect that adoption of the new guidance will have a material effect on Farmer Mac's statement of cash flows.

(e) Reclassifications

Certain reclassifications of prior period information were made to conform to the current period presentation.

2. INVESTMENT SECURITIES

The following tables set forth information about Farmer Mac's investment securities as of September 30, 2016 and December 31, 2015:

Table 2.1

As of September 30, 2016						
	Amount Outstanding	Unamortized Premium/ (Discount)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
<i>(in thousands)</i>						
Available-for-sale:						
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 19,700	\$ —	\$ 19,700	\$ —	\$ (2,118)	\$ 17,582
Floating rate asset-backed securities	52,406	(214)	52,192	2	(540)	51,654
Floating rate corporate debt securities	15,000	—	15,000	19	—	15,019
Floating rate Government/GSE guaranteed mortgage-backed securities	1,299,576	2,911	1,302,487	1,798	(3,594)	1,300,691
Fixed rate GSE guaranteed mortgage-backed securities ⁽¹⁾	582	2,694	3,276	4,430	—	7,706
Floating rate GSE subordinated debt	70,000	—	70,000	—	(3,596)	66,404
Fixed rate senior agency debt	362,295	154	362,449	98	(24)	362,523
Fixed rate U.S. Treasuries	1,178,776	353	1,179,129	524	(47)	1,179,606
Total available-for-sale	2,998,335	5,898	3,004,233	6,871	(9,919)	3,001,185
Total investment securities	<u>\$ 2,998,335</u>	<u>\$ 5,898</u>	<u>\$ 3,004,233</u>	<u>\$ 6,871</u>	<u>\$ (9,919)</u>	<u>\$ 3,001,185</u>

⁽¹⁾ Fair value includes \$7.1 million of an interest-only security with a notional amount of \$146.7 million.

As of December 31, 2015						
	Amount Outstanding	Unamortized Premium/ (Discount)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
<i>(in thousands)</i>						
Available-for-sale:						
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 46,500	\$ —	\$ 46,500	\$ —	\$ (1,576)	\$ 44,924
Floating rate asset-backed securities	74,744	(253)	74,491	14	(776)	73,729
Floating rate corporate debt securities	10,000	—	10,000	—	(9)	9,991
Fixed rate corporate debt securities	10,000	(1)	9,999	—	(5)	9,994
Floating rate Government/GSE guaranteed mortgage-backed securities	1,353,495	3,515	1,357,010	2,768	(4,319)	1,355,459
Fixed rate GSE guaranteed mortgage-backed securities ⁽¹⁾	692	3,117	3,809	4,095	—	7,904
Floating rate GSE subordinated debt	70,000	—	70,000	—	(3,751)	66,249
Fixed rate senior agency debt	214,000	(25)	213,975	12	—	213,987
Fixed rate U.S. Treasuries	993,680	(417)	993,263	2	(477)	992,788
Total available-for-sale	2,773,111	5,936	2,779,047	6,891	(10,913)	2,775,025
Trading:						
Floating rate asset-backed securities	2,211	—	2,211	—	(1,720)	491
Total investment securities	<u>\$ 2,775,322</u>	<u>\$ 5,936</u>	<u>\$ 2,781,258</u>	<u>\$ 6,891</u>	<u>\$ (12,633)</u>	<u>\$ 2,775,516</u>

⁽¹⁾ Fair value includes \$7.2 million of an interest-only security with a notional amount of \$148.5 million.

Farmer Mac did not sell any securities from its available-for-sale investment portfolio during the three months ended September 30, 2016, compared to proceeds of \$8.7 million received in the same period in

2015, resulting in gross realized gains of \$0.1 million. During the nine months ended September 30, 2016, Farmer Mac received proceeds of \$186.8 million from the sale of securities from its available-for-sale investment portfolio, resulting in gross realized gains of \$0.1 million and gross realized losses of \$0.1 million, compared to proceeds of \$83.7 million for the same period in 2015, resulting in gross realized gains of \$0.1 million.

As of September 30, 2016 and December 31, 2015, unrealized losses on available-for-sale investment securities were as follows:

Table 2.2

	As of September 30, 2016			
	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)			
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ —	\$ —	\$ 17,582	\$ (2,118)
Floating rate asset-backed securities	25,446	(95)	19,540	(445)
Floating rate Government/GSE guaranteed mortgage-backed securities	610,561	(1,874)	239,860	(1,720)
Floating rate GSE subordinated debt	—	—	66,404	(3,596)
Fixed rate U.S. Treasuries	368,017	(47)	—	—
Fixed rate senior agency debt	49,932	(24)	—	—
Total	<u>\$ 1,053,956</u>	<u>\$ (2,040)</u>	<u>\$ 343,386</u>	<u>\$ (7,879)</u>

	As of December 31, 2015			
	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)			
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ —	\$ —	\$ 18,124	\$ (1,576)
Floating rate asset-backed securities	44,552	(464)	9,975	(312)
Floating rate corporate debt securities	4,991	(9)	—	—
Fixed rate corporate debt securities	9,994	(5)	—	—
Floating rate Government/GSE guaranteed mortgage-backed securities	794,959	(3,408)	100,192	(911)
Floating rate GSE subordinated debt	—	—	66,249	(3,751)
Fixed rate U.S. Treasuries	944,842	(477)	—	—
Total	<u>\$ 1,799,338</u>	<u>\$ (4,363)</u>	<u>\$ 194,540</u>	<u>\$ (6,550)</u>

The unrealized losses presented above are principally due to a general widening of credit spreads from the dates of acquisition to September 30, 2016 and December 31, 2015, 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 September 30, 2016, 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+," except one that was rated "A-." As of December 31, 2015, 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+," except three that were rated "A-." The unrealized losses were on 77 and 69 individual investment securities as of September 30, 2016 and December 31, 2015, respectively.

As of September 30, 2016, 27 of the securities in loss positions had been in loss positions for more than 12 months and had a total unrealized loss of \$7.9 million. As of December 31, 2015, 17 of the securities in loss positions had been in loss positions for more than 12 months and had a total unrealized loss of \$6.6 million. Securities in unrealized loss positions for 12 months or longer have a fair value as of September 30, 2016 that is, on average, approximately 98 percent 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. Accordingly, Farmer Mac has concluded that none of the unrealized losses on these available-for-sale investment securities represents other-than-temporary impairment as of September 30, 2016 and December 31, 2015.

Farmer Mac did not own any held-to-maturity investment securities as of September 30, 2016 and December 31, 2015. As of September 30, 2016, Farmer Mac did not own any trading investment securities. As of December 31, 2015, Farmer Mac owned trading investment securities with an amortized cost of \$2.2 million, a fair value of \$0.5 million, and a weighted average yield of 4.41 percent.

The amortized cost, fair value, and weighted average yield of available-for-sale investment securities by remaining contractual maturity as of September 30, 2016 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 September 30, 2016		
	Available-for-Sale Securities		
	Amortized Cost	Fair Value	Weighted- Average Yield
	<i>(dollars in thousands)</i>		
Due within one year	\$ 1,256,154	\$ 1,256,654	0.61%
Due after one year through five years	529,229	529,322	0.99%
Due after five years through ten years	393,580	393,905	1.18%
Due after ten years	825,270	821,304	1.11%
Total	<u>\$ 3,004,233</u>	<u>\$ 3,001,185</u>	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 September 30, 2016 and December 31, 2015:

Table 3.1

	As of September 30, 2016					
	Unpaid Principal Balance	Unamortized Premium/ (Discount)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)					
Held-to-maturity:						
AgVantage	\$ 1,156,203	\$ (2,557)	\$ 1,153,646	\$ 13,203	\$ (895)	\$ 1,165,954
Available-for-sale:						
AgVantage	\$ 4,913,438	\$ (38)	\$ 4,913,400	\$ 51,458	\$ (60,201)	\$ 4,904,657
Farmer Mac Guaranteed USDA Securities	32,364	(283)	32,081	743	—	32,824
Total Farmer Mac Guaranteed Securities	4,945,802	(321)	4,945,481	52,201	(60,201)	4,937,481
USDA Securities	1,905,457	1,778	1,907,235	73,114	(22)	1,980,327
Total available-for-sale	\$ 6,851,259	\$ 1,457	\$ 6,852,716	\$ 125,315	\$ (60,223)	\$ 6,917,808
Trading:						
USDA Securities	\$ 21,958	\$ 1,406	\$ 23,364	\$ 207	\$ (82)	\$ 23,489

	As of December 31, 2015					
	Unpaid Principal Balance	Unamortized Premium/ (Discount)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)					
Held-to-maturity:						
AgVantage	\$ 1,274,431	\$ (415)	\$ 1,274,016	\$ 7,801	\$ —	\$ 1,281,817
Available-for-sale:						
AgVantage	\$ 4,164,952	\$ —	\$ 4,164,952	\$ 26,831	\$ (70,539)	\$ 4,121,244
Farmer Mac Guaranteed USDA Securities	31,554	(333)	31,221	140	—	31,361
Total Farmer Mac Guaranteed Securities	4,196,506	(333)	4,196,173	26,971	(70,539)	4,152,605
USDA Securities	1,849,322	1,890	1,851,212	37,160	(28)	1,888,344
Total available-for-sale	\$ 6,045,828	\$ 1,557	\$ 6,047,385	\$ 64,131	\$ (70,567)	\$ 6,040,949
Trading:						
USDA Securities	\$ 27,129	\$ 1,934	\$ 29,063	\$ 125	\$ (213)	\$ 28,975

As of September 30, 2016 and December 31, 2015, 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 September 30, 2016			
	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
	<i>(in thousands)</i>			
Held-to-maturity:				
AgVantage	\$ 404,105	\$ (895)	\$ —	\$ —
Available-for-sale:				
AgVantage	\$ 847,890	\$ (2,110)	\$ 2,101,844	\$ (58,091)
USDA Securities	—	—	98,460	(22)
Total available-for-sale	\$ 847,890	\$ (2,110)	\$ 2,200,304	\$ (58,113)

	As of December 31, 2015			
	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
	<i>(in thousands)</i>			
Available-for-sale:				
AgVantage	\$ 1,193,866	\$ (41,835)	\$ 1,104,981	\$ (28,704)
USDA Securities	—	—	103,010	(28)
Total available-for-sale	\$ 1,193,866	\$ (41,835)	\$ 1,207,991	\$ (28,732)

The unrealized losses presented above are principally due to higher interest rates from the date of acquisition to September 30, 2016 and December 31, 2015, as applicable. 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. The unrealized losses from AgVantage securities were on 25 available-for-sale securities as of September 30, 2016. There were four held-to-maturity AgVantage securities with an unrealized loss as of September 30, 2016. The unrealized losses from AgVantage securities were on 22 available-for-sale securities as of December 31, 2015. There were no unrealized losses from held-to-maturity securities as of December 31, 2015. As of September 30, 2016, 17 available-for-sale AgVantage securities had been in a loss position for more than 12 months with a total unrealized loss of \$58.1 million. As of December 31, 2015, 8 available-for-sale AgVantage securities had been in a loss position for more than 12 months with a total unrealized loss of \$28.7 million. Farmer Mac has concluded that none of the unrealized losses on its held-to-maturity Farmer Mac Guaranteed Securities and available-for-sale Farmer Mac Guaranteed Securities and USDA Securities are other-than-temporary impairment as of either September 30, 2016 or December 31, 2015. Farmer Mac does not intend to sell these securities, and it is not more likely than not that Farmer Mac will be required to sell the securities before recovery of the amortized cost basis.

During the three and nine months ended September 30, 2016 and 2015, Farmer Mac did not sell any Farmer Mac Guaranteed Securities and USDA Securities.

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 September 30, 2016 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 September 30, 2016			
Available-for-Sale Securities			
	Amortized Cost	Fair Value	Weighted- Average Yield
	<i>(dollars in thousands)</i>		
Due within one year	\$ 313,714	\$ 314,376	1.39%
Due after one year through five years	2,726,577	2,756,149	1.79%
Due after five years through ten years	1,299,644	1,321,453	2.05%
Due after ten years	2,512,781	2,525,830	2.63%
Total	<u>\$ 6,852,716</u>	<u>\$ 6,917,808</u>	2.13%

As of September 30, 2016			
Held-to-Maturity Securities			
	Amortized Cost	Fair Value	Weighted- Average Yield
	<i>(dollars in thousands)</i>		
Due within one year	\$ 407,942	\$ 408,699	1.60%
Due after one year through five years	693,616	701,844	1.94%
Due after five years through ten years	52,088	55,411	3.24%
Total	<u>\$ 1,153,646</u>	<u>\$ 1,165,954</u>	1.88%

As of September 30, 2016, Farmer Mac owned trading USDA Securities with an amortized cost of \$23.4 million, a fair value of \$23.5 million, and a weighted average yield of 5.48 percent. As of December 31, 2015, Farmer Mac owned trading USDA Securities with an amortized cost of \$29.1 million, a fair value of \$29.0 million, and a weighted average yield of 5.53 percent.

4. FINANCIAL DERIVATIVES

Farmer Mac enters into financial derivative transactions principally 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. Certain financial derivatives are designated as fair value hedges of fixed rate assets, primarily classified as available-for-sale, to protect against fair value changes in the assets related to a benchmark interest rate (i.e., LIBOR). Other financial derivatives are designated as cash flow hedges to mitigate the volatility of future interest rate payments on floating rate debt.

All financial derivatives are recorded on the balance sheet at fair value as a freestanding asset or liability. Changes in the fair values of financial derivatives not designated as cash flow hedges are reported in

"(Losses)/gains on financial derivatives and hedging activities" in the consolidated statements of operations. For financial derivatives designated in fair value hedging relationships, changes in the fair values of the hedged items, which are primarily fixed rate AgVantage securities, related to the risk being hedged are also reported in "(Losses)/gains on financial derivatives and hedging activities" in the consolidated statements of operations. Interest accruals on derivatives designated in fair value hedging relationships are recorded in "Net interest income" in the consolidated statements of operations. For the three and nine months ended September 30, 2016, the amount of interest expense recognized on those derivatives was \$4.0 million and \$12.9 million, respectively. For the three and nine months ended September 30, 2015, the amount of interest expense recognized on those derivatives was \$5.7 million and \$16.8 million, respectively. For financial derivatives designated in cash flow hedging relationships, the effective portion of the derivative gain/loss is recorded in other comprehensive income and any ineffective portion is recognized immediately in "(Losses)/gains on financial derivatives and hedging activities" in the consolidated statements of operations. Because the hedging instrument is an interest rate swap and the hedged forecasted transactions are future interest payments on variable-rate debt, amounts recorded in other comprehensive income are reclassified to "Total interest expense" in conjunction with the recognition of interest expense on the debt. During the three and nine months ended September 30, 2016, \$0.5 million and \$1.5 million, respectively, was reclassified out of other comprehensive income into interest expense. For the three and nine months ended September 30, 2015, \$0.4 million and \$0.8 million, respectively, was reclassified out of other comprehensive income into interest expense. As of September 30, 2016, Farmer Mac expects to reclassify \$1.9 million pretax, or \$1.2 million after-tax, from accumulated other comprehensive income, net of tax, to earnings over the next twelve months. This amount could differ from amounts actually recognized due to changes in interest rates, hedge designations, and the addition of other hedges subsequent to September 30, 2016. During the three and nine months ended September 30, 2016 and 2015, there were no gains or losses from interest rate swaps designated as cash flow hedges reclassified to earnings because it became probable the original forecasted transaction would not occur.

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 September 30, 2016 and December 31, 2015 and the effects of financial derivatives on the consolidated statements of operations for the three and nine months ended September 30, 2016 and 2015:

Table 4.1

	As of September 30, 2016						
	Notional Amount	Fair Value		Weighted- Average Pay Rate	Weighted- Average Receive Rate	Weighted- Average Forward Price	Weighted- Average Remaining Life (in years)
		Asset	(Liability)				
<i>(dollars in thousands)</i>							
Fair value hedges:							
Interest rate swaps:							
Pay fixed non-callable	\$ 1,642,609	\$ 598	\$ (56,979)	1.73%	0.76%		4.89
Receive fixed non-callable	30,000	565	—	0.97%	1.75%		3.71
Cash flow hedges:							
Interest rate swaps:							
Pay fixed non-callable	181,000	24	(8,112)	2.21%	0.94%		7.23
No hedge designation:							
Interest rate swaps:							
Pay fixed non-callable	439,762	—	(56,313)	4.07%	0.72%		6.10
Receive fixed non-callable	5,442,968	3,440	(2,028)	0.62%	0.66%		0.47
Receive fixed callable	30,000	—	(44)	0.70%	0.58%		0.58
Basis swaps	475,000	—	(439)	0.70%	0.61%		0.78
Treasury futures	20,200	—	(49)			130.88	
Credit valuation adjustment		—	168				
Total financial derivatives	<u>\$ 8,261,539</u>	<u>\$ 4,627</u>	<u>\$ (123,796)</u>				
Collateral pledged		—	89,732				
Net amount		<u>\$ 4,627</u>	<u>\$ (34,064)</u>				

As of December 31, 2015

	Notional Amount	Fair Value		Weighted-Average Pay Rate	Weighted-Average Receive Rate	Weighted-Average Forward Price	Weighted-Average Remaining Life (in years)
		Asset	(Liability)				
(dollars in thousands)							
Fair value hedges:							
Interest rate swaps:							
Pay fixed non-callable	\$ 1,276,285	\$ 949	\$ (26,703)	2.35%	0.37%		4.16
Cash flow hedges:							
Interest rate swaps:							
Pay fixed non-callable	119,000	8	(1,381)	2.25%	0.64%		7.03
No hedge designation:							
Interest rate swaps:							
Pay fixed non-callable	454,041	229	(44,528)	3.73%	0.33%		6.02
Receive fixed non-callable	5,590,638	2,384	(4,205)	0.31%	0.47%		0.57
Receive fixed callable	230,000	—	(421)	0.41%	0.91%		2.26
Basis swaps	725,000	232	(131)	0.22%	0.38%		2.33
Treasury futures	35,000	19	—			125.96	
Credit valuation adjustment		(5)	170				
Total financial derivatives	<u>\$ 8,429,964</u>	<u>\$ 3,816</u>	<u>\$ (77,199)</u>				
Collateral pledged		—	37,986				
Net amount		<u>\$ 3,816</u>	<u>\$ (39,213)</u>				

Table 4.2

	(Losses)/gains on financial derivatives and hedging activities			
	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
<i>(in thousands)</i>				
Fair value hedges:				
Interest rate swaps ⁽¹⁾	\$ 11,276	\$ (12,646)	\$ (30,062)	\$ (4,330)
Hedged items	(10,550)	15,834	35,778	13,356
Gains on fair value hedges	726	3,188	5,716	9,026
Cash flow hedges:				
Loss recognized (ineffective portion)	(68)	(57)	(322)	(424)
Losses on cash flow hedges	(68)	(57)	(322)	(424)
No hedge designation:				
Interest rate swaps	(2,333)	(11,421)	(16,820)	(5,213)
Agency forwards	79	(966)	(789)	(2,108)
Treasury futures	(5)	(312)	(864)	(342)
Losses on financial derivatives not designated in hedging relationships	(2,259)	(12,699)	(18,473)	(7,663)
(Losses)/gains on financial derivatives and hedging activities	<u>\$ (1,601)</u>	<u>\$ (9,568)</u>	<u>\$ (13,079)</u>	<u>\$ 939</u>

⁽¹⁾ Included in the assessment of hedge effectiveness as of September 30, 2016, but excluded from the amounts in the table, were losses of \$1.0 million and \$4.2 million for the three and nine months ended September 30, 2016, attributable to the fair value of the swaps at the inception of the hedging relationship. Accordingly, the amounts recognized as hedge ineffectiveness for the three and nine months ended September 30, 2016 were losses of \$0.2 million and gains of \$1.5 million, respectively. The comparable amounts as of September 30, 2015 were losses of \$2.9 million and \$8.6 million for the three and nine months ended September 30, 2015, attributable to the fair value of the swaps at the inception of the hedging relationship and, accordingly, gains of \$0.3 million and \$0.4 million for the three and nine months ended September 30, 2015, attributable to hedge ineffectiveness.

As of September 30, 2016 and December 31, 2015, Farmer Mac's credit exposure to interest rate swap counterparties, excluding netting arrangements and any adjustment for nonperformance risk, but including accrued interest, was \$12.1 million and \$6.4 million, respectively; however, including netting arrangements and accrued interest, Farmer Mac's credit exposure was zero and \$47,000 as of September 30, 2016 and December 31, 2015, respectively. As of September 30, 2016, Farmer Mac held no cash as collateral for its derivatives in net asset positions and had no uncollateralized net asset positions. As of December 31, 2015, Farmer Mac held no cash collateral for its derivatives in net asset positions, resulting in uncollateralized net asset positions of \$47,000.

As of September 30, 2016 and December 31, 2015, the fair value of Farmer Mac's derivatives in a net liability position including accrued interest but excluding netting arrangements and any adjustment for nonperformance risk, was \$132.3 million and \$90.1 million, respectively; however, including netting arrangements and accrued interest, the fair value of Farmer Mac's derivatives in a net liability position at the counterparty level, was \$117.6 million and \$83.2 million as of September 30, 2016 and December 31, 2015, respectively. Farmer Mac posted cash of \$89.7 million and no investment securities as of September 30, 2016 and posted cash of \$38.0 million and no investment securities as of December 31, 2015. 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 September 30, 2016 and December 31, 2015, it could have been required to settle its obligations under the agreements or post additional collateral of \$27.9 million and \$45.2 million, respectively. As of September 30, 2016 and December 31, 2015, 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.

For certain derivatives, Farmer Mac clears interest rate swaps through a clearinghouse. Farmer Mac posts initial and variation margin to the clearinghouses through which centrally-cleared derivatives and futures contracts are traded. These collateral postings expose Farmer Mac to institutional credit risk in the event that either the clearinghouse or the futures commission merchant that Farmer Mac uses to post collateral to the clearinghouse fails to meet its obligations. Conversely, the use of centrally-cleared derivatives mitigates Farmer Mac's credit risk to individual counterparties because clearinghouses assume the credit risk among counterparties in centrally-cleared derivatives transactions. Of Farmer Mac's \$8.2 billion notional amount of interest rate swaps outstanding as of September 30, 2016, \$7.3 billion were cleared through swap clearinghouses. Of Farmer Mac's \$8.4 billion notional amount of interest rate swaps outstanding as of December 31, 2015, \$6.2 billion were cleared through swap clearinghouses.

5. LOANS AND ALLOWANCE FOR LOSSES

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 adjustments. Loans held for sale are reported at the lower of cost or fair value determined on a pooled basis. As of September 30, 2016 and December 31, 2015, Farmer Mac had no loans held for sale. The following table displays the composition of the loan balances as of September 30, 2016 and December 31, 2015:

Table 5.1

	As of September 30, 2016			As of December 31, 2015		
	Unsecuritized	In Consolidated Trusts	Total	Unsecuritized	In Consolidated Trusts	Total
<i>(in thousands)</i>						
Farm & Ranch	\$ 2,298,714	\$ 1,039,770	\$ 3,338,484	\$ 2,249,864	\$ 708,111	\$ 2,957,975
Rural Utilities	993,139	—	993,139	1,008,126	—	1,008,126
Total unpaid principal balance ⁽¹⁾	3,291,853	1,039,770	4,331,623	3,257,990	708,111	3,966,101
Unamortized premiums, discounts and other cost basis adjustments	7,765	—	7,765	423	—	423
Total loans	3,299,618	1,039,770	4,339,388	3,258,413	708,111	3,966,524
Allowance for loan losses	(4,049)	(905)	(4,954)	(3,736)	(744)	(4,480)
Total loans, net of allowance	\$ 3,295,569	\$ 1,038,865	\$ 4,334,434	\$ 3,254,677	\$ 707,367	\$ 3,962,044

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

Allowance for Losses

Farmer Mac maintains an allowance for losses presented in two components on its consolidated balance sheets: (1) an allowance for loan losses to account for estimated probable losses on loans held, and (2) a reserve for losses to account for estimated probable losses on loans underlying LTSPCs and off-balance sheet Farmer Mac Guaranteed Securities (excluding AgVantage securities). As of September 30, 2016 and December 31, 2015, Farmer Mac's total allowances for losses were \$6.9 million and \$6.6 million, respectively. See Note 6 for more information about off-balance sheet Farmer Mac Guaranteed Securities and LTSPCs.

The following is a summary of the changes in the total allowance for losses for the three and nine months months ended September 30, 2016 and 2015:

Table 5.2

	As of September 30, 2016			As of September 30, 2015		
	Allowance for Loan Losses	Reserve for Losses	Total Allowance for Losses	Allowance for Loan Losses	Reserve for Losses	Total Allowance for Losses
	(in thousands)					
For the Three Months Ended:						
Beginning Balance	\$ 4,893	\$ 2,191	\$ 7,084	\$ 5,939	\$ 4,637	\$ 10,576
Provision for/(release of) losses	191	(222)	(31)	(1,164)	861	(303)
Charge-offs	(130)	—	(130)	—	—	—
Ending Balance	<u>\$ 4,954</u>	<u>\$ 1,969</u>	<u>\$ 6,923</u>	<u>\$ 4,775</u>	<u>\$ 5,498</u>	<u>\$ 10,273</u>
For the Nine Months Ended:						
Beginning Balance	\$ 4,480	\$ 2,083	\$ 6,563	\$ 5,864	\$ 4,263	\$ 10,127
Provision for/(release of) losses	604	(114)	490	(978)	1,235	257
Charge-offs	(130)	—	(130)	(111)	—	(111)
Ending Balance	<u>\$ 4,954</u>	<u>\$ 1,969</u>	<u>\$ 6,923</u>	<u>\$ 4,775</u>	<u>\$ 5,498</u>	<u>\$ 10,273</u>

During third quarter 2016, Farmer Mac recorded provisions to its allowance for loan losses of \$0.2 million and releases to its reserve for losses of \$0.2 million. The provisions to the allowance for loan losses recorded during third quarter 2016 were attributable to an increase in the general allowance due to overall net volume growth in on-balance sheet Farm & Ranch loans and downgrades in risk ratings for a small number of loans. The releases to the reserve for losses recorded during the three months ended September 30, 2016 were attributable to the release of a specific reserve on an impaired livestock loan underlying an LTSPC that was required to be removed from the LTSPC pool by the originator during third quarter 2016. Farmer Mac recorded \$0.1 million of charge-offs to its allowance for loan losses during third quarter 2016.

During third quarter 2015, Farmer Mac recorded releases to its allowance for loan losses of \$1.2 million and provisions to its reserve for losses of \$0.9 million. The releases to the allowance for loan losses recorded during third quarter 2015 were primarily attributable to a reduction in the specific allowance for a permanent planting loan based on the updated appraised value of the collateral underlying such loan. The provisions to the reserve for losses recorded during third quarter 2015 were attributable to an increase in the specific allowance on two impaired canola facility loans underlying an LTSPC with one borrower. Farmer Mac recorded no charge-offs to its allowance for loan losses during third quarter 2015.

The following tables present the changes in the total allowance for losses for the three and nine months ended September 30, 2016 and 2015 by commodity type:

Table 5.3

	September 30, 2016						
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
	(in thousands)						
For the Three Months Ended:							
Beginning Balance	\$ 3,111	\$ 1,144	\$ 1,906	\$ 447	\$ 473	\$ 3	\$ 7,084
Provision for/(release of) losses	103	198	(354)	36	(13)	(1)	(31)
Charge-offs	—	—	—	(130)	—	—	(130)
Ending Balance	<u>\$ 3,214</u>	<u>\$ 1,342</u>	<u>\$ 1,552</u>	<u>\$ 353</u>	<u>\$ 460</u>	<u>\$ 2</u>	<u>\$ 6,923</u>
For the Nine Months Ended:							
Beginning Balance	\$ 2,791	\$ 931	\$ 1,781	\$ 408	\$ 649	\$ 3	\$ 6,563
Provision for/(release of) losses	423	411	(229)	75	(189)	(1)	490
Charge-offs	—	—	—	(130)	—	—	(130)
Ending Balance	<u>\$ 3,214</u>	<u>\$ 1,342</u>	<u>\$ 1,552</u>	<u>\$ 353</u>	<u>\$ 460</u>	<u>\$ 2</u>	<u>\$ 6,923</u>
	September 30, 2015						
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
	(in thousands)						
For the Three Months Ended:							
Beginning Balance	\$ 2,653	\$ 2,221	\$ 1,760	\$ 433	\$ 3,502	\$ 7	\$ 10,576
Provision for/(release of) losses	110	(1,151)	39	(49)	748	—	(303)
Charge-offs	—	—	—	—	—	—	—
Ending Balance	<u>\$ 2,763</u>	<u>\$ 1,070</u>	<u>\$ 1,799</u>	<u>\$ 384</u>	<u>\$ 4,250</u>	<u>\$ 7</u>	<u>\$ 10,273</u>
For the Nine Months Ended							
Beginning Balance	\$ 2,519	\$ 2,159	\$ 1,423	\$ 467	\$ 3,552	\$ 7	\$ 10,127
Provision for/(release of) losses	244	(1,089)	376	28	698	—	257
Charge-offs	—	—	—	(111)	—	—	(111)
Ending Balance	<u>\$ 2,763</u>	<u>\$ 1,070</u>	<u>\$ 1,799</u>	<u>\$ 384</u>	<u>\$ 4,250</u>	<u>\$ 7</u>	<u>\$ 10,273</u>

The following tables present the unpaid principal balances of loans held and loans underlying LTSPCs and off-balance sheet Farmer Mac Guaranteed Securities (excluding AgVantage securities) and the related total allowance for losses by impairment method and commodity type as of September 30, 2016 and December 31, 2015:

Table 5.4

	As of September 30, 2016						
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
	(in thousands)						
Ending Balance:							
Collectively evaluated for impairment:							
On-balance sheet	\$ 2,051,432	\$ 544,237	\$ 501,713	\$ 162,029	\$ 11,731	\$ 8,790	\$ 3,279,932
Off-balance sheet	1,284,363	453,183	748,908	122,768	32,901	4,813	2,646,936
Total	\$ 3,335,795	\$ 997,420	\$ 1,250,621	\$ 284,797	\$ 44,632	\$ 13,603	\$ 5,926,868
Individually evaluated for impairment:							
On-balance sheet	\$ 26,788	\$ 17,783	\$ 6,976	\$ 7,005	\$ —	\$ —	\$ 58,552
Off-balance sheet	9,999	2,895	5,536	878	—	—	19,308
Total	\$ 36,787	\$ 20,678	\$ 12,512	\$ 7,883	\$ —	\$ —	\$ 77,860
Total Farm & Ranch loans:							
On-balance sheet	\$ 2,078,220	\$ 562,020	\$ 508,689	\$ 169,034	\$ 11,731	\$ 8,790	\$ 3,338,484
Off-balance sheet	1,294,362	456,078	754,444	123,646	32,901	4,813	2,666,244
Total	\$ 3,372,582	\$ 1,018,098	\$ 1,263,133	\$ 292,680	\$ 44,632	\$ 13,603	\$ 6,004,728
Allowance for Losses:							
Collectively evaluated for impairment:							
On-balance sheet	\$ 1,947	\$ 579	\$ 757	\$ 146	\$ 34	\$ —	\$ 3,463
Off-balance sheet	498	259	271	52	426	2	1,508
Total	\$ 2,445	\$ 838	\$ 1,028	\$ 198	\$ 460	\$ 2	\$ 4,971
Individually evaluated for impairment:							
On-balance sheet	\$ 473	\$ 479	\$ 410	\$ 129	\$ —	\$ —	\$ 1,491
Off-balance sheet	296	25	114	26	—	—	461
Total	\$ 769	\$ 504	\$ 524	\$ 155	\$ —	\$ —	\$ 1,952
Total Farm & Ranch loans:							
On-balance sheet	\$ 2,420	\$ 1,058	\$ 1,167	\$ 275	\$ 34	\$ —	\$ 4,954
Off-balance sheet	794	284	385	78	426	2	1,969
Total	\$ 3,214	\$ 1,342	\$ 1,552	\$ 353	\$ 460	\$ 2	\$ 6,923

As of December 31, 2015

	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
	(in thousands)						
Ending Balance:							
Collectively evaluated for impairment:							
On-balance sheet	\$ 1,911,039	\$ 433,654	\$ 444,320	\$ 92,712	\$ 15,944	\$ 3,199	\$ 2,900,868
Off-balance sheet	1,313,872	483,473	777,663	110,378	56,208	7,142	2,748,736
Total	\$ 3,224,911	\$ 917,127	\$ 1,221,983	\$ 203,090	\$ 72,152	\$ 10,341	\$ 5,649,604
Individually evaluated for impairment:							
On-balance sheet	\$ 12,803	\$ 21,247	\$ 5,958	\$ 7,261	\$ 9,838	\$ —	\$ 57,107
Off-balance sheet	5,937	3,037	8,840	774	—	—	18,588
Total	\$ 18,740	\$ 24,284	\$ 14,798	\$ 8,035	\$ 9,838	\$ —	\$ 75,695
Total Farm & Ranch loans:							
On-balance sheet	\$ 1,923,842	\$ 454,901	\$ 450,278	\$ 99,973	\$ 25,782	\$ 3,199	\$ 2,957,975
Off-balance sheet	1,319,809	486,510	786,503	111,152	56,208	7,142	2,767,324
Total	\$ 3,243,651	\$ 941,411	\$ 1,236,781	\$ 211,125	\$ 81,990	\$ 10,341	\$ 5,725,299
Allowance for Losses:							
Collectively evaluated for impairment:							
On-balance sheet	\$ 1,968	\$ 434	\$ 702	\$ 116	\$ 167	\$ —	\$ 3,387
Off-balance sheet	347	137	292	65	482	3	1,326
Total	\$ 2,315	\$ 571	\$ 994	\$ 181	\$ 649	\$ 3	\$ 4,713
Individually evaluated for impairment:							
On-balance sheet	\$ 290	\$ 218	\$ 384	\$ 201	\$ —	\$ —	\$ 1,093
Off-balance sheet	186	142	403	26	—	—	757
Total	\$ 476	\$ 360	\$ 787	\$ 227	\$ —	\$ —	\$ 1,850
Total Farm & Ranch loans:							
On-balance sheet	\$ 2,258	\$ 652	\$ 1,086	\$ 317	\$ 167	\$ —	\$ 4,480
Off-balance sheet	533	279	695	91	482	3	2,083
Total	\$ 2,791	\$ 931	\$ 1,781	\$ 408	\$ 649	\$ 3	\$ 6,563

The following tables present by commodity type the unpaid principal balances, recorded investment, and specific allowance for losses related to impaired loans and the recorded investment in loans on nonaccrual status as of September 30, 2016 and December 31, 2015:

Table 5.5

	As of September 30, 2016							
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total	
	(in thousands)							
Impaired Loans:								
With no specific allowance:								
Recorded investment	\$ 6,851	\$ 9,217	\$ 2,423	\$ 1,709	\$ —	\$ —	\$ 20,200	
Unpaid principal balance	6,838	9,204	2,422	1,706	—	—	20,170	
With a specific allowance:								
Recorded investment ⁽¹⁾	29,985	11,494	9,993	6,187	—	—	57,659	
Unpaid principal balance	29,949	11,474	10,090	6,177	—	—	57,690	
Associated allowance	769	504	524	155	—	—	1,952	
Total:								
Recorded investment	36,836	20,711	12,416	7,896	—	—	77,859	
Unpaid principal balance	36,787	20,678	12,512	7,883	—	—	77,860	
Associated allowance	769	504	524	155	—	—	1,952	
Recorded investment of loans on nonaccrual status ⁽²⁾	\$ 7,964	\$ 9,859	\$ 3,292	\$ 5,456	\$ —	\$ —	\$ 26,571	

⁽¹⁾ Impairment analysis was performed in the aggregate in consideration of similar risk characteristics of the assets and historical statistics on \$55.5 million (71 percent) of impaired loans as of September 30, 2016, which resulted in a specific allowance of \$1.3 million.

⁽²⁾ Includes \$10.6 million of loans that are less than 90 days delinquent but which have not met Farmer Mac's performance criteria for returning to accrual status.

As of December 31, 2015									
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total		
	(in thousands)								
Impaired Loans:									
With no specific allowance:									
Recorded investment	\$ 3,772	\$ 12,340	\$ 5,644	\$ 1,851	\$ —	\$ —	\$ 23,607		
Unpaid principal balance	3,720	12,346	5,645	1,851	—	—	23,562		
With a specific allowance:									
Recorded investment ⁽¹⁾	15,103	11,939	9,050	6,185	9,838	—	52,115		
Unpaid principal balance	15,020	11,938	9,153	6,184	9,838	—	52,133		
Associated allowance	476	360	787	227	—	—	1,850		
Total:									
Recorded investment	18,875	24,279	14,694	8,036	9,838	—	75,722		
Unpaid principal balance	18,740	24,284	14,798	8,035	9,838	—	75,695		
Associated allowance	476	360	787	227	—	—	1,850		
Recorded investment of loans on nonaccrual status ⁽²⁾	\$ 5,105	\$ 16,546	\$ 4,313	\$ 5,870	\$ 9,838	\$ —	\$ 41,672		

⁽¹⁾ Impairment analysis was performed in the aggregate in consideration of similar risk characteristics of the assets and historical statistics on \$46.4 million (61 percent) of impaired loans as of December 31, 2015, which resulted in a specific allowance of \$1.0 million.

⁽²⁾ Includes \$14.7 million of loans that are less than 90 days delinquent but which have not met Farmer Mac's performance criteria for returning to accrual status.

The following table presents by commodity type the average recorded investment and interest income recognized on impaired loans for the three and nine months ended September 30, 2016 and 2015:

Table 5.6

September 30, 2016						
Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
<i>(in thousands)</i>						
For the Three Months Ended:						
Average recorded investment in impaired loans	\$ 33,032	\$ 22,980	\$ 12,120	\$ 8,172	\$ —	\$ 76,304
Income recognized on impaired loans	46	236	81	74	—	437
For the Nine Months Ended:						
Average recorded investment in impaired loans	\$ 28,293	\$ 25,277	\$ 13,704	\$ 8,654	\$ 4,668	\$ 80,596
Income recognized on impaired loans	108	789	229	251	—	1,377

September 30, 2015						
Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
<i>(in thousands)</i>						
For the Three Months Ended:						
Average recorded investment in impaired loans	\$ 27,133	\$ 37,911	\$ 12,534	\$ 9,989	\$ 13,500	\$ 101,067
Income recognized on impaired loans	33	234	76	76	—	419
For the Nine Months Ended:						
Average recorded investment in impaired loans	\$ 23,176	\$ 39,337	\$ 13,923	\$ 11,248	\$ 6,750	\$ 94,434
Income recognized on impaired loans	373	459	273	226	—	1,331

For the three and nine months ended September 30, 2016, there were no troubled debt restructurings ("TDRs"). For the three months ended September 30, 2015, there were no TDRs. For the nine months ended September 30, 2015, the recorded investment of loans determined to be TDRs was \$1.1 million both before and after restructuring. As of September 30, 2016 and 2015, there were no TDRs identified during the previous 12 months that were in default under the modified terms. The impact of TDRs on Farmer Mac's allowance for loan losses was immaterial for the three and nine months ended September 30, 2016 and 2015.

When particular criteria are met, such as the default of the borrower, Farmer Mac becomes entitled to purchase the defaulted loans underlying Farmer Mac Guaranteed Securities (commonly referred to as "removal-of-account" provisions). Farmer Mac records all such defaulted loans at their unpaid principal balance during the period in which Farmer Mac becomes entitled to purchase the loans and therefore regains effective control over the transferred loans. In accordance with the terms of all LTSPCs, Farmer Mac acquires loans that are either 90 days or 120 days delinquent (depending on the provisions of the applicable agreement) upon the request of the counterparty. Subsequent to the purchase, these defaulted loans are treated as nonaccrual loans and, therefore, interest is accounted for on the cash basis. Any decreases in expected cash flows are recognized as impairment.

During the three months ended September 30, 2016, Farmer Mac purchased three defaulted loans having an unpaid principal balance of \$1.1 million from pools underlying LTSPCs and Farm & Ranch Guaranteed Securities. During the nine months ended September 30, 2016, Farmer Mac purchased eight defaulted loans having an unpaid principal balance of \$2.5 million from pools underlying LTSPCs and Farm & Ranch Guaranteed Securities. During the three months ended September 30, 2015, Farmer Mac purchased one defaulted loan having an unpaid principal balance of \$0.3 million from a pool underlying a Farm & Ranch Guaranteed Security. During the nine months ended September 30, 2015, Farmer Mac purchased three defaulted loans having an unpaid principal balance of \$2.2 million from pools underlying Farm & Ranch Guaranteed Securities.

The following tables present information related to Farmer Mac's acquisition of defaulted loans for the three and nine months ended September 30, 2016 and 2015 and the outstanding balances and carrying amounts of all such loans as of September 30, 2016 and December 31, 2015:

Table 5.7

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	<i>(in thousands)</i>			
Unpaid principal balance at acquisition date:				
Loans underlying LTSPCs	\$ 852	\$ —	\$ 2,118	\$ —
Loans underlying off-balance sheet Farmer Mac Guaranteed Securities (excluding AgVantage securities)	250	263	398	2,244
Total unpaid principal balance at acquisition date	1,102	263	2,516	2,244
Contractually required payments receivable	1,109	264	2,544	2,334
Impairment recognized subsequent to acquisition	—	1	208	110
Recovery/release of allowance for all outstanding acquired defaulted loans	21	882	31	1,003

	As of	
	September 30, 2016	December 31, 2015
	<i>(in thousands)</i>	
Outstanding balance	\$ 15,447	\$ 36,195
Carrying amount	13,815	34,015

Net credit losses and 90-day delinquencies as of and for the periods indicated for loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities) and LTSPCs are presented in the table below. As of September 30, 2016, there were no delinquencies and no probable losses inherent in Farmer Mac's Rural Utilities loan portfolio and Farmer Mac had not experienced credit losses on any Rural Utilities loans.

Table 5.8

	90-Day Delinquencies ⁽¹⁾		Net Credit Losses	
	As of		For the Nine Months Ended	
	September 30, 2016	December 31, 2015	September 30, 2016	September 30, 2015
	(in thousands)			
On-balance sheet assets:				
Farm & Ranch:				
Loans	\$ 16,016	\$ 26,935	\$ 154	\$ 160
Total on-balance sheet	\$ 16,016	\$ 26,935	\$ 154	\$ 160
Off-balance sheet assets:				
Farm & Ranch:				
LTSPCs	\$ 2,361	\$ 5,201	\$ —	\$ —
Total off-balance sheet	\$ 2,361	\$ 5,201	\$ —	\$ —
Total	\$ 18,377	\$ 32,136	\$ 154	\$ 160

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

Of the \$16.0 million of on-balance sheet loans reported as 90-day delinquencies as of September 30, 2016, \$0.3 million were loans subject to "removal-of-account" provisions. Of the \$26.9 million of on-balance sheet loans reported as 90-day delinquencies as of December 31, 2015, none were loans subject to "removal-of-account" provisions.

Credit Quality Indicators

The following tables present credit quality indicators related to Farm & Ranch loans held and loans underlying LTSPCs and off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities) as of September 30, 2016 and December 31, 2015:

Table 5.9

As of September 30, 2016							
	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
<i>(in thousands)</i>							
Credit risk profile by internally assigned grade ⁽¹⁾							
On-balance sheet:							
Acceptable	\$ 2,019,856	\$ 532,007	\$ 464,122	\$ 160,120	\$ 11,731	\$ 8,790	\$ 3,196,626
Special mention ⁽²⁾	31,576	12,229	37,591	1,909	—	—	83,305
Substandard ⁽³⁾	26,788	17,784	6,976	7,005	—	—	58,553
Total on-balance sheet	\$ 2,078,220	\$ 562,020	\$ 508,689	\$ 169,034	\$ 11,731	\$ 8,790	\$ 3,338,484
Off-Balance Sheet:							
Acceptable	\$ 1,203,775	\$ 418,765	\$ 710,670	\$ 117,897	\$ 30,854	\$ 4,216	\$ 2,486,177
Special mention ⁽²⁾	58,946	17,375	25,260	1,117	2,047	502	105,247
Substandard ⁽³⁾	31,641	19,938	18,514	4,632	—	95	74,820
Total off-balance sheet	\$ 1,294,362	\$ 456,078	\$ 754,444	\$ 123,646	\$ 32,901	\$ 4,813	\$ 2,666,244
Total Ending Balance:							
Acceptable	\$ 3,223,631	\$ 950,772	\$ 1,174,792	\$ 278,017	\$ 42,585	\$ 13,006	\$ 5,682,803
Special mention ⁽²⁾	90,522	29,604	62,851	3,026	2,047	502	188,552
Substandard ⁽³⁾	58,429	37,722	25,490	11,637	—	95	133,373
Total	\$ 3,372,582	\$ 1,018,098	\$ 1,263,133	\$ 292,680	\$ 44,632	\$ 13,603	\$ 6,004,728
Commodity analysis of past due loans ⁽¹⁾							
On-balance sheet	\$ 7,021	\$ 5,423	\$ 1,382	\$ 2,190	\$ —	\$ —	\$ 16,016
Off-balance sheet	1,577	15	306	463	—	—	2,361
90 days or more past due	\$ 8,598	\$ 5,438	\$ 1,688	\$ 2,653	\$ —	\$ —	\$ 18,377

⁽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, 2015

	Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Other	Total
	(in thousands)						
Credit risk profile by internally assigned grade ⁽¹⁾							
On-balance sheet:							
Acceptable	\$ 1,888,762	\$ 431,038	\$ 409,003	\$ 89,541	\$ 15,944	\$ 3,199	\$ 2,837,487
Special mention ⁽²⁾	22,255	2,616	35,317	2,918	—	—	63,106
Substandard ⁽³⁾	12,825	21,247	5,958	7,514	9,838	—	57,382
Total on-balance sheet	\$ 1,923,842	\$ 454,901	\$ 450,278	\$ 99,973	\$ 25,782	\$ 3,199	\$ 2,957,975
Off-Balance Sheet							
Acceptable	\$ 1,279,454	\$ 473,335	\$ 753,472	\$ 102,990	\$ 56,208	\$ 6,517	\$ 2,671,976
Special mention ⁽²⁾	24,422	7,226	13,121	2,938	—	523	48,230
Substandard ⁽³⁾	15,933	5,949	19,910	5,224	—	102	47,118
Total off-balance sheet	\$ 1,319,809	\$ 486,510	\$ 786,503	\$ 111,152	\$ 56,208	\$ 7,142	\$ 2,767,324
Total Ending Balance:							
Acceptable	\$ 3,168,216	\$ 904,373	\$ 1,162,475	\$ 192,531	\$ 72,152	\$ 9,716	\$ 5,509,463
Special mention ⁽²⁾	46,677	9,842	48,438	5,856	—	523	111,336
Substandard ⁽³⁾	28,758	27,196	25,868	12,738	9,838	102	104,500
Total	\$ 3,243,651	\$ 941,411	\$ 1,236,781	\$ 211,125	\$ 81,990	\$ 10,341	\$ 5,725,299
Commodity analysis of past due loans ⁽¹⁾							
On-balance sheet	\$ 4,656	\$ 7,405	\$ 2,517	\$ 2,519	\$ 9,838	\$ —	\$ 26,935
Off-balance sheet	511	—	4,542	148	—	—	5,201
90 days or more past due	\$ 5,167	\$ 7,405	\$ 7,059	\$ 2,667	\$ 9,838	\$ —	\$ 32,136

⁽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.

Concentrations of Credit Risk

The following table sets forth the geographic and commodity/collateral diversification, as well as the range of original loan-to-value ratios, for all Farm & Ranch loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities) and LTSPCs as of September 30, 2016 and December 31, 2015:

Table 5.10

	As of	
	September 30, 2016	December 31, 2015
	(in thousands)	
By commodity/collateral type:		
Crops	\$ 3,372,582	\$ 3,243,651
Permanent plantings	1,018,098	941,411
Livestock	1,263,133	1,236,781
Part-time farm	292,680	211,125
Ag. Storage and Processing	44,632	81,990
Other	13,603	10,341
Total	<u>\$ 6,004,728</u>	<u>\$ 5,725,299</u>
By geographic region ⁽¹⁾ :		
Northwest	\$ 616,869	\$ 582,127
Southwest	1,796,800	1,726,927
Mid-North	2,051,860	2,009,654
Mid-South	824,236	769,831
Northeast	225,068	215,883
Southeast	489,895	420,877
Total	<u>\$ 6,004,728</u>	<u>\$ 5,725,299</u>
By original loan-to-value ratio:		
0.00% to 40.00%	\$ 1,687,390	\$ 1,594,818
40.01% to 50.00%	1,379,453	1,279,321
50.01% to 60.00%	1,662,645	1,593,025
60.01% to 70.00%	1,087,226	1,107,710
70.01% to 80.00%	164,868	126,860
80.01% to 90.00%	23,146	23,565
Total	<u>\$ 6,004,728</u>	<u>\$ 5,725,299</u>

⁽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).

The original loan-to-value ratio is calculated by dividing the loan principal balance at the time of guarantee, purchase, or commitment by the appraised value at the date of loan origination or, when available, the updated appraised value at the time of guarantee, purchase, or commitment. Current loan-to-value ratios may be higher or lower than the original loan-to-value ratios.

6. OFF-BALANCE SHEET GUARANTEES AND LONG-TERM STANDBY PURCHASE COMMITMENTS

Farmer Mac offers two credit enhancement alternatives to direct loan purchases that allow approved lenders the ability to retain the cash flow benefits of their loans and increase their liquidity and lending capacity: (1) Farmer Mac Guaranteed Securities, which are available through the Farm & Ranch, USDA Guarantees, Rural Utilities, or Institutional Credit lines of business, and (2) LTSPCs, which are available through the Farm & Ranch or Rural Utilities lines of business.

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 September 30, 2016 and December 31, 2015, 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 September 30, 2016		As of December 31, 2015
	<i>(in thousands)</i>		
Farm & Ranch:			
Guaranteed Securities	\$	441,417	\$ 514,051
USDA Guarantees:			
Farmer Mac Guaranteed USDA Securities		61,054	10,272
Institutional Credit:			
AgVantage Securities		984,871	984,871
Revolving floating rate AgVantage facility ⁽¹⁾		300,000	300,000
Total off-balance sheet Farmer Mac Guaranteed Securities	\$	1,787,342	\$ 1,809,194

⁽¹⁾ Relates to a revolving floating rate AgVantage facility subject to specified contractual terms. Farmer Mac receives a fixed fee based on the full dollar amount of the facility.

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 Nine Months Ended	
	September 30, 2016	September 30, 2015
	<i>(in thousands)</i>	
Proceeds from new securitizations	\$ 457,369	\$ 231,242
Guarantee fees received	2,333	2,704
Purchases of assets from the trusts	(2,118)	(2,244)

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. This liability approximated \$6.3 million as of September 30, 2016 and \$8.3 million as of December 31, 2015. As of September 30, 2016 and December 31, 2015, the weighted-average remaining maturity of all loans underlying off-balance sheet Farmer Mac Guaranteed Securities, excluding AgVantage securities, was 10.8 years and 11.3 years,

respectively. As of September 30, 2016 and December 31, 2015, the weighted-average remaining maturity of the off-balance sheet AgVantage securities was 0.9 years and 1.7 years, respectively.

Long-Term Standby Purchase Commitments

An LTSPC is a commitment by Farmer Mac to purchase eligible loans from an identified pool of loans under specified circumstances set forth in the applicable agreement, either for cash or in exchange for Farmer Mac Guaranteed Securities, on one or more undetermined future dates. As consideration for its assumption of the credit risk on loans underlying an LTSPC, Farmer Mac receives a commitment fee payable monthly in arrears in an amount approximating what would have been the guarantee fee if the transaction were structured as a swap for Farmer Mac Guaranteed Securities.

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, was \$3.1 billion as of September 30, 2016 and \$2.8 billion as of December 31, 2015.

As of September 30, 2016 and December 31, 2015, the weighted-average remaining maturity of all loans underlying LTSPCs was 15.0 years and 14.6 years, respectively. For those LTSPCs issued or modified on or after January 1, 2003, Farmer Mac has recorded a liability for its obligation to stand ready under the commitment in the guarantee and commitment obligation on the consolidated balance sheets. This liability approximated \$31.5 million as of September 30, 2016 and \$30.3 million as of December 31, 2015.

7. EQUITY

Non-Controlling Interest in Farmer Mac II LLC

On January 25, 2010, Farmer Mac completed a private offering of \$250.0 million of securities issued by a newly formed Delaware statutory trust. The trust securities, called Farm Asset-Linked Capital Securities or "FALConS," represented undivided beneficial ownership interests in 250,000 shares of non-cumulative perpetual preferred stock (the "Farmer Mac II LLC Preferred Stock") of Farmer Mac's subsidiary, Farmer Mac II LLC, a Delaware limited liability company. The Farmer Mac II LLC Preferred Stock had a liquidation preference of \$1,000 per share. On May 14, 2014, Farmer Mac purchased \$6.0 million of FALConS from certain holders. On March 30, 2015, Farmer Mac II LLC redeemed all of the outstanding shares of Farmer Mac II LLC Preferred Stock which, in turn, triggered the redemption of all of the outstanding FALConS on that same day. Farmer Mac recognized an expense of \$8.1 million in deferred issuance costs upon the retirement of the Farmer Mac II LLC Preferred Stock.

Common Stock

On September 8, 2015, Farmer Mac's board of directors approved a share repurchase program authorizing Farmer Mac to repurchase up to \$25 million of its outstanding Class C non-voting common stock through September 8, 2017. As of September 30, 2016, Farmer Mac had repurchased approximately 668,000 shares of Class C non-voting common stock at a cost of approximately \$19.6 million pursuant to the share repurchase program.

Capital Requirements

Farmer Mac is subject to the following capital requirements:

- Statutory minimum capital requirement – Farmer Mac's statutory minimum capital level is an amount of core capital (stockholders' equity less accumulated other comprehensive income) equal to the sum of 2.75 percent of Farmer Mac's aggregate on-balance sheet assets, as calculated for regulatory purposes, plus 0.75 percent of the aggregate off-balance sheet obligations of Farmer Mac, specifically including:
 - the unpaid principal balance of outstanding Farmer Mac Guaranteed Securities;
 - instruments issued or guaranteed by Farmer Mac that are substantially equivalent to Farmer Mac Guaranteed Securities, including LTSPCs; and
 - other off-balance sheet obligations of Farmer Mac.
- Statutory critical capital requirement – Farmer Mac's critical capital level is an amount of core capital equal to 50 percent of the total minimum capital requirement at that time.
- Risk-based capital requirement – Farmer Mac's charter directs FCA to establish a risk-based capital stress test for Farmer Mac, using specified stress-test parameters.

Farmer Mac is required to comply with the higher of the minimum capital requirement and the risk-based capital requirement. As of September 30, 2016 and December 31, 2015, 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 September 30, 2016, Farmer Mac's minimum capital requirement was \$474.8 million and its core capital level was \$587.1 million, which was \$112.3 million above the minimum capital requirement as of that date. As of December 31, 2015, Farmer Mac's minimum capital requirement was \$462.1 million and its core capital level was \$564.5 million, which was \$102.4 million above the minimum capital requirement as of that date.

In accordance with FCA'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, qualifying preferred stock, and accumulated other comprehensive income allocable to investments not included in one of the four operating lines of business) and imposing restrictions on Tier 1-eligible dividends and any discretionary bonus payments in the event that this capital falls below specified thresholds.

8. FAIR VALUE DISCLOSURES

As of September 30, 2016, Farmer Mac's assets and liabilities recorded at fair value included financial instruments valued at \$7.0 billion whose fair values were estimated by management in the absence of readily determinable fair values (i.e., level 3). These financial instruments measured as level 3 represented 44 percent of total assets and 69 percent of financial instruments measured at fair value as of September 30, 2016. As of December 31, 2015, Farmer Mac's assets and liabilities recorded at fair value included financial instruments valued at \$6.1 billion whose fair values were estimated by management in the absence of readily determinable fair values. These financial instruments measured as level 3 represented 39 percent of total assets and 69 percent of financial instruments measured at fair value as of December 31, 2015.

Net 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. 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 during the first nine months of 2016 and 2015.

The following tables present information about Farmer Mac's assets and liabilities measured at fair value on a recurring and nonrecurring basis as of September 30, 2016 and December 31, 2015, respectively, and indicate the fair value hierarchy of the valuation techniques used by Farmer Mac to determine such fair value:

Table 8.1

Assets and Liabilities Measured at Fair Value as of September 30, 2016

	Level 1	Level 2	Level 3	Total
	<i>(in thousands)</i>			
Recurring:				
Assets:				
Investment Securities:				
Available-for-sale:				
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ —	\$ —	\$ 17,582	\$ 17,582
Floating rate asset-backed securities	—	51,654	—	51,654
Floating rate corporate debt securities	—	15,019	—	15,019
Floating rate Government/GSE guaranteed mortgage-backed securities	—	1,300,691	—	1,300,691
Fixed rate GSE guaranteed mortgage-backed securities	—	7,706	—	7,706
Floating rate GSE subordinated debt	—	66,404	—	66,404
Fixed rate senior agency debt	—	362,523	—	362,523
Fixed rate U.S. Treasuries	1,179,606	—	—	1,179,606
Total Investment Securities	1,179,606	1,803,997	17,582	3,001,185
Farmer Mac Guaranteed Securities:				
Available-for-sale:				
AgVantage	—	—	4,904,657	4,904,657
Farmer Mac Guaranteed USDA Securities	—	—	32,824	32,824
Total Farmer Mac Guaranteed Securities	—	—	4,937,481	4,937,481
USDA Securities:				
Available-for-sale	—	—	1,980,327	1,980,327
Trading	—	—	23,489	23,489
Total USDA Securities	—	—	2,003,816	2,003,816
Financial derivatives	—	4,627	—	4,627
Total Assets at fair value	\$ 1,179,606	\$ 1,808,624	\$ 6,958,879	\$ 9,947,109
Liabilities:				
Financial derivatives	\$ 49	\$ 123,747	\$ —	\$ 123,796
Total Liabilities at fair value	\$ 49	\$ 123,747	\$ —	\$ 123,796
Nonrecurring:				
Assets:				
Loans held for investment	\$ —	\$ —	\$ 1,234	\$ 1,234
REO	—	—	349	349
Total Nonrecurring Assets at fair value	\$ —	\$ —	\$ 1,583	\$ 1,583

Assets and Liabilities Measured at Fair Value as of December 31, 2015

	Level 1	Level 2	Level 3	Total
	(in thousands)			
Recurring:				
Assets:				
Investment Securities:				
Available-for-sale:				
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ —	\$ —	\$ 44,924	\$ 44,924
Floating rate asset-backed securities	—	73,729	—	73,729
Floating rate corporate debt securities	—	9,991	—	9,991
Fixed rate corporate debt	—	9,994	—	9,994
Floating rate Government/GSE guaranteed mortgage-backed securities	—	1,355,459	—	1,355,459
Fixed rate GSE guaranteed mortgage-backed securities	—	7,904	—	7,904
Floating rate GSE subordinated debt	—	66,249	—	66,249
Fixed rate senior agency debt	—	213,987	—	213,987
Fixed rate U.S. Treasuries	992,788	—	—	992,788
Total available-for-sale	992,788	1,737,313	44,924	2,775,025
Trading:				
Floating rate asset-backed securities	—	—	491	491
Total trading	—	—	491	491
Total Investment Securities	992,788	1,737,313	45,415	2,775,516
Farmer Mac Guaranteed Securities:				
Available-for-sale:				
AgVantage	—	—	4,121,244	4,121,244
Farmer Mac Guaranteed USDA Securities	—	—	31,361	31,361
Total Farmer Mac Guaranteed Securities	—	—	4,152,605	4,152,605
USDA Securities:				
Available-for-sale	—	—	1,888,344	1,888,344
Trading	—	—	28,975	28,975
Total USDA Guaranteed Securities	—	—	1,917,319	1,917,319
Financial derivatives	19	3,797	—	3,816
Total Assets at fair value	\$ 992,807	\$ 1,741,110	\$ 6,115,339	\$ 8,849,256
Liabilities:				
Financial derivatives	\$ —	\$ 77,199	\$ —	\$ 77,199
Total Liabilities at fair value	\$ —	\$ 77,199	\$ —	\$ 77,199
Nonrecurring:				
Assets:				
Loans held for investment	\$ —	\$ —	\$ 11,443	\$ 11,443
REO	\$ —	\$ —	\$ 388	\$ 388
Total Nonrecurring Assets at fair value	\$ —	\$ —	\$ 11,831	\$ 11,831

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 nine months ended September 30, 2016 and 2015.

Table 8.2

Level 3 Assets and Liabilities Measured at Fair Value for the Three Months Ended September 30, 2016

	Beginning Balance	Purchases	Sales	Settlements	Realized and Unrealized Gains included in Income	Unrealized Gains/ (Losses) included in Other Comprehen- sive Income	Ending Balance
	<i>(in thousands)</i>						
Recurring:							
Assets:							
Investment Securities:							
Available-for-sale:							
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 17,730	\$ —	\$ —	\$ —	\$ —	\$ (148)	\$ 17,582
Total available-for-sale	17,730	—	—	—	—	(148)	17,582
Trading:							
Floating rate asset-backed securities ⁽¹⁾	281	—	—	(1,887)	1,606	—	—
Total trading	281	—	—	(1,887)	1,606	—	—
Total Investment Securities	18,011	—	—	(1,887)	1,606	(148)	17,582
Farmer Mac Guaranteed Securities:							
Available-for-sale:							
AgVantage	4,697,584	263,196	—	(64,895)	(10,960)	19,732	4,904,657
Farmer Mac Guaranteed USDA Securities	33,447	—	—	(504)	—	(119)	32,824
Total Farmer Mac Guaranteed Securities	4,731,031	263,196	—	(65,399)	(10,960)	19,613	4,937,481
USDA Securities:							
Available-for-sale	1,967,759	119,201	(31,866)	(55,772)	—	(18,995)	1,980,327
Trading ⁽²⁾	24,787	—	—	(874)	(424)	—	23,489
Total USDA Securities	1,992,546	119,201	(31,866)	(56,646)	(424)	(18,995)	2,003,816
Total Assets at fair value	\$ 6,741,588	\$ 382,397	\$ (31,866)	\$ (123,932)	\$ (9,778)	\$ 470	\$ 6,958,879

⁽¹⁾ Unrealized gains are attributable to assets still held as of September 30, 2016 and are recorded in "Gains/(losses) on trading securities."

⁽²⁾ Includes unrealized losses of \$0.4 million attributable to assets still held as of September 30, 2016 that are recorded in "Gains/(losses) on trading securities."

Level 3 Assets and Liabilities Measured at Fair Value for the Three Months Ended September 30, 2015

	Beginning Balance	Purchases	Sales	Settlements	Realized and Unrealized Gains included in Income	Unrealized Gains/ (Losses) included in Other Comprehen -sive Income	Ending Balance
	(in thousands)						
Recurring:							
Assets:							
Investment Securities:							
Available-for-sale:							
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 40,182	\$ —	\$ —	\$ —	\$ (100)	\$ 4,842	\$ 44,924
Total available-for-sale	40,182	—	—	—	(100)	4,842	44,924
Trading:							
Floating rate asset-backed securities ⁽¹⁾	606	—	—	(106)	50	—	550
Total trading	606	—	—	(106)	50	—	550
Total Investment Securities	40,788	—	—	(106)	(50)	4,842	45,474
Farmer Mac Guaranteed Securities:							
Available-for-sale:							
AgVantage	4,016,200	200,000	—	(59,311)	15,834	(46,761)	4,125,962
Farmer Mac Guaranteed USDA Securities	35,008	—	—	(2,614)	—	(1,686)	30,708
Total Farmer Mac Guaranteed Securities	4,051,208	200,000	—	(61,925)	15,834	(48,447)	4,156,670
USDA Securities:							
Available-for-sale	1,825,406	91,374	—	(51,282)	—	(11,076)	1,854,422
Trading ⁽²⁾	33,770	—	—	(1,777)	(57)	—	31,936
Total USDA Securities	1,859,176	91,374	—	(53,059)	(57)	(11,076)	1,886,358
Total Assets at fair value	\$ 5,951,172	\$ 291,374	\$ —	\$ (115,090)	\$ 15,727	\$ (54,681)	\$ 6,088,502

⁽¹⁾ Unrealized gains are attributable to assets still held as of September 30, 2015 and are recorded in "Gains/(losses) on trading securities."

⁽²⁾ Includes unrealized gains of \$0.1 million attributable to assets still held as of September 30, 2015 that are recorded in "Gains/(losses) on trading securities."

Level 3 Assets and Liabilities Measured at Fair Value for the Nine Months Ended September 30, 2016

	Beginning Balance	Purchases	Sales	Settlements	Realized and Unrealized Gains included in Income	Unrealized Gains/ (Losses) included in Other Comprehen- sive Income	Ending Balance
	(in thousands)						
Recurring:							
Assets:							
Investment Securities:							
Available-for-sale:							
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 44,924	\$ —	\$ (26,806)	\$ —	\$ 6	\$ (542)	\$ 17,582
Total available-for-sale	44,924	—	(26,806)	—	6	(542)	17,582
Trading:							
Floating rate asset-backed securities ⁽¹⁾	491	—	—	(2,213)	1,722	—	—
Total trading	491	—	—	(2,213)	1,722	—	—
Total Investment Securities	45,415	—	(26,806)	(2,213)	1,728	(542)	17,582
Farmer Mac Guaranteed Securities:							
Available-for-sale:							
AgVantage	4,121,244	1,342,572	—	(594,124)	26,475	8,490	4,904,657
Farmer Mac Guaranteed USDA Securities	31,361	4,100	—	(3,240)	—	603	32,824
Total Farmer Mac Guaranteed Securities	4,152,605	1,346,672	—	(597,364)	26,475	9,093	4,937,481
USDA Securities:							
Available-for-sale	1,888,344	351,914	(58,628)	(237,262)	—	35,959	1,980,327
Trading ⁽²⁾	28,975	—	—	(5,698)	212	—	23,489
Total USDA Securities	1,917,319	351,914	(58,628)	(242,960)	212	35,959	2,003,816
Total Assets at fair value	\$ 6,115,339	\$ 1,698,586	\$ (85,434)	\$ (842,537)	\$ 28,415	\$ 44,510	\$ 6,958,879

⁽¹⁾ Unrealized gains are attributable to assets still held as of September 30, 2016 and are recorded in "Gains/(losses) on trading securities."

⁽²⁾ Includes unrealized gains of \$0.1 million attributable to assets still held as of September 30, 2016 that are recorded in "Gains/(losses) on trading securities."

Level 3 Assets and Liabilities Measured at Fair Value for the Nine Months Ended September 30, 2015

	Beginning Balance	Purchases	Sales	Settlements	Realized and Unrealized Gains included in Income	Unrealized Gains/ (Losses) included in Other Comprehen- sive Income	Ending Balance
	(in thousands)						
Recurring:							
Assets:							
Investment Securities:							
Available-for-sale:							
Floating rate auction-rate certificates backed by Government guaranteed student loans	\$ 40,576	\$ —	\$ —	\$ —	\$ (100)	\$ 4,448	\$ 44,924
Total available-for-sale	40,576	—	—	—	(100)	4,448	44,924
Trading:							
Floating rate asset-backed securities ⁽¹⁾	689	—	—	(543)	404	—	550
Total trading	689	—	—	(543)	404	—	550
Total Investment Securities	41,265	—	—	(543)	304	4,448	45,474
Farmer Mac Guaranteed Securities:							
Available-for-sale:							
AgVantage	3,631,662	664,175	—	(126,308)	13,356	(56,923)	4,125,962
Farmer Mac Guaranteed USDA Securities	27,619	12,512	—	(9,032)	—	(391)	30,708
Total Farmer Mac Guaranteed Securities	3,659,281	676,687	—	(135,340)	13,356	(57,314)	4,156,670
USDA Securities:							
Available-for-sale	1,731,222	291,981	—	(184,665)	—	15,884	1,854,422
Trading ⁽²⁾	40,310	—	—	(8,494)	120	—	31,936
Total USDA Securities	1,771,532	291,981	—	(193,159)	120	15,884	1,886,358
Total Assets at fair value	\$ 5,472,078	\$ 968,668	\$ —	\$ (329,042)	\$ 13,780	\$ (36,982)	\$ 6,088,502

⁽¹⁾ Unrealized gains are attributable to assets still held as of September 30, 2015 and are recorded in "Gains/(losses) on trading securities."

⁽²⁾ Includes unrealized gains of \$0.2 million attributable to assets still held as of September 30, 2015 that are recorded in "Gains/(losses) on trading securities."

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 September 30, 2016 and December 31, 2015.

Table 8.3

	As of September 30, 2016			
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	\$ 17,582	Indicative bids	Range of broker quotes	89.3% - 89.3% (89.3%)
Farmer Mac Guaranteed Securities:				
AgVantage	\$ 4,904,657	Discounted cash flow	Discount rate	1.4% - 2.6% (1.7%)
Farmer Mac Guaranteed USDA Securities	\$ 32,824	Discounted cash flow	Discount rate	1.3% - 4.3% (1.8%)
			CPR	9% - 23% (12%)
USDA Securities	\$ 2,003,816	Discounted cash flow	Discount rate	1.8% - 5.1% (3.0%)
			CPR	0% - 22% (10%)

	As of December 31, 2015			
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	\$ 44,924	Indicative bids	Range of broker quotes	92.0% - 99.6% (96.6%)
Floating rate asset-backed securities	\$ 491	Discounted cash flow	Discount rate	18.3% - 23.9% (21.5%)
			CPR	10.0%
Farmer Mac Guaranteed Securities:				
AgVantage	\$ 4,121,244	Discounted cash flow	Discount rate	1.1% - 3.3% (1.8%)
Farmer Mac Guaranteed USDA Securities	\$ 31,361	Discounted cash flow	Discount rate	1.0% - 3.9% (1.8%)
			CPR	9% - 20% (10.0%)
USDA Securities	\$ 1,917,319	Discounted cash flow	Discount rate	1.3% - 5.1% (3.1%)
			CPR	0% - 19% (7.0%)

The significant unobservable inputs used in the fair value measurements of Farmer Mac Guaranteed Securities and USDA Securities are prepayment rates and discount rates 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. Prepayment rates are not presented in the table above for AgVantage securities because they generally do not pay down principal based on amortization schedules but instead typically have fixed maturity dates when the secured general obligations are due.

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 September 30, 2016 and December 31, 2015:

Table 8.4

	As of September 30, 2016		As of December 31, 2015	
	Fair Value	Carrying Amount	Fair Value	Carrying Amount
	<i>(in thousands)</i>			
Financial assets:				
Cash and cash equivalents	\$ 313,581	\$ 313,581	\$ 1,210,084	\$ 1,210,084
Investment securities	3,001,185	3,001,185	2,775,516	2,775,516
Farmer Mac Guaranteed Securities	6,103,435	6,091,127	5,434,422	5,426,621
USDA Securities	2,003,816	2,003,816	1,917,319	1,917,319
Loans	4,448,360	4,334,434	4,027,660	3,962,044
Financial derivatives	4,627	4,627	3,816	3,816
Guarantee and commitment fees receivable:				
LTSPCs	32,054	32,318	31,953	31,240
Farmer Mac Guaranteed Securities	7,004	7,337	8,872	8,949
Financial liabilities:				
Notes payable:				
Due within one year	9,300,334	9,295,700	9,108,468	9,111,461
Due after one year	4,957,884	4,820,388	5,009,310	4,967,036
Debt securities of consolidated trusts held by third parties	1,062,667	1,044,559	713,316	713,536
Financial derivatives	123,796	123,796	77,199	77,199
Guarantee and commitment obligations:				
LTSPCs	31,237	31,501	31,015	30,301
Farmer Mac Guaranteed Securities	5,930	6,263	8,230	8,308

The carrying value of cash and cash equivalents is a reasonable estimate of their approximate fair value and is classified as level 1 within the fair value hierarchy. Investment securities primarily are valued based on unadjusted quoted prices in active markets and are classified as level 2 within the fair value hierarchy. Farmer Mac internally models the fair value of its loan portfolio, including loans held for sale, 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 within the fair value hierarchy. Financial derivatives primarily are valued using unadjusted counterparty valuations and are classified as level 2 within the fair value hierarchy. 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 within the fair value hierarchy. 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 within the fair value hierarchy. 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.

9. BUSINESS SEGMENT REPORTING

The following tables present core earnings for Farmer Mac's reportable operating segments and a reconciliation to consolidated net income for the three and nine months ended September 30, 2016 and 2015:

Table 9.1

Core Earnings by Business Segment For the Three Months Ended September 30, 2016							
	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
	<i>(in thousands)</i>						
Net interest income	\$ 12,039	\$ 5,753	\$ 2,963	\$ 12,226	\$ 2,582	\$ —	\$ 35,563
Less: reconciling adjustments ⁽¹⁾⁽²⁾⁽³⁾	(1,336)	(564)	(320)	(799)	(345)	3,364	—
Net effective spread	10,703	5,189	2,643	11,427	2,237	3,364	—
Guarantee and commitment fees ⁽²⁾	3,516	29	529	459	—	(735)	3,798
Other income/(expense) ⁽³⁾⁽⁴⁾	276	95	—	—	(388)	320	303
Non-interest income/(loss)	3,792	124	529	459	(388)	(415)	4,101
Provision for loan losses	(191)	—	—	—	—	—	(191)
Release of losses	222	—	—	—	—	—	222
Other non-interest expense	(3,673)	(933)	(553)	(1,253)	(3,113)	—	(9,525)
Non-interest expense ⁽⁵⁾	(3,451)	(933)	(553)	(1,253)	(3,113)	—	(9,303)
Core earnings before income taxes	10,853	4,380	2,619	10,633	(1,264)	2,949 ⁽⁶⁾	30,170
Income tax (expense)/benefit	(3,799)	(1,533)	(917)	(3,722)	474	(1,032)	(10,529)
Core earnings before preferred stock dividends and attribution of income to non-controlling interest - preferred stock dividends	7,054	2,847	1,702	6,911	(790)	1,917 ⁽⁶⁾	19,641
Preferred stock dividends	—	—	—	—	(3,295)	—	(3,295)
Non-controlling interest - preferred stock dividends	—	—	—	—	18	—	18
Segment core earnings/(losses)	\$ 7,054	\$ 2,847	\$ 1,702	\$ 6,911	\$ (4,067)	\$ 1,917 ⁽⁶⁾	\$ 16,364
Total assets at carrying value	\$ 3,436,641	\$ 2,062,195	\$ 1,008,903	\$ 6,045,227	\$ 3,447,939	\$ —	\$ 16,000,905
Total on- and off-balance sheet program assets at principal balance	\$ 6,004,728	\$ 2,020,834	\$ 1,867,666	\$ 7,354,511		—	\$ 17,247,739

- (1) Excludes 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 and hedging activities" on the consolidated financial statements, to determine the effective funding cost for each operating segment.
- (4) Includes reconciling adjustments for fair value adjustments on financial derivatives and trading assets. Also includes a reconciling adjustment related to the recognition of deferred gains over the estimated lives of certain Farmer Mac Guaranteed Securities and USDA Securities.
- (5) Includes directly attributable costs and an allocation of indirectly attributable costs based on headcount.
- (6) 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 and attribution of income to non-controlling interest 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 September 30, 2015

	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
	(in thousands)						
Net interest income	\$ 10,838	\$ 4,515	\$ 3,130	\$ 11,686	\$ 2,014	\$ —	\$ 32,183
Less: reconciling adjustments ⁽¹⁾⁽²⁾⁽³⁾	(1,210)	115	(223)	(415)	(63)	1,796	—
Net effective spread	9,628	4,630	2,907	11,271	1,951	1,796	—
Guarantee and commitment fees ⁽²⁾	3,785	7	100	436	—	(796)	3,532
Other income/(expense) ⁽³⁾⁽⁴⁾	513	13	—	—	(619)	(8,420)	(8,513)
Non-interest income/(loss)	4,298	20	100	436	(619)	(9,216)	(4,981)
Release of allowance for loan losses	1,164	—	—	—	—	—	1,164
Provision for losses	(861)	—	—	—	—	—	(861)
Other non-interest expense	(4,228)	(986)	(838)	(522)	(2,986)	—	(9,560)
Non-interest expense ⁽⁵⁾	(5,089)	(986)	(838)	(522)	(2,986)	—	(10,421)
Core earnings before income taxes	10,001	3,664	2,169	11,185	(1,654)	(7,420) ⁽⁶⁾	17,945
Income tax (expense)/benefit	(3,500)	(1,282)	(760)	(3,915)	533	2,597	(6,327)
Core earnings before preferred stock dividends and attribution of income to non-controlling interest - preferred stock dividends	6,501	2,382	1,409	7,270	(1,121)	(4,823) ⁽⁶⁾	11,618
Preferred stock dividends	—	—	—	—	(3,295)	—	(3,295)
Non-controlling interest - preferred stock dividends	—	—	—	—	36	—	36
Segment core earnings/(losses)	<u>\$ 6,501</u>	<u>\$ 2,382</u>	<u>\$ 1,409</u>	<u>\$ 7,270</u>	<u>\$ (4,380)</u>	<u>\$ (4,823)⁽⁶⁾</u>	<u>\$ 8,359</u>
Total assets at carrying value	\$ 2,856,097	\$ 1,941,166	\$ 987,115	\$ 5,405,360	\$ 3,664,107	\$ —	\$ 14,853,845
Total on- and off-balance sheet program assets at principal balance	\$ 5,504,030	\$ 1,898,625	\$ 1,500,307	\$ 6,725,017		—	\$ 15,627,979

- (1) Excludes 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 and hedging activities" on the consolidated financial statements, to determine the effective funding cost for each operating segment.
- (4) Includes reconciling adjustments for fair value adjustments on financial derivatives and trading assets. Also includes a reconciling adjustment related to the recognition of deferred gains over the estimated lives of certain Farmer Mac Guaranteed Securities and USDA Securities.
- (5) Includes directly attributable costs and an allocation of indirectly attributable costs based on headcount.
- (6) 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 and attribution of income to non-controlling interest reconciled to net income; and segment core earnings reconciled to net income attributable to common stockholders.

Core Earnings by Business Segment
For the Nine Months Ended September 30, 2016

	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
	(in thousands)						
Net interest income	\$ 34,772	\$ 15,743	\$ 8,682	\$ 36,084	\$ 8,280	\$ —	\$ 103,561
Less: reconciling adjustments ⁽¹⁾⁽²⁾⁽³⁾	(4,733)	(1,658)	(939)	(2,160)	(897)	10,387	—
Net effective spread	30,039	14,085	7,743	33,924	7,383	10,387	—
Guarantee and commitment fees ⁽²⁾	11,390	50	1,197	1,375	—	(2,933)	11,079
Other income/(expense) ⁽³⁾⁽⁴⁾	451	178	—	—	(1,288)	(9,259)	(9,918)
Non-interest income/(loss)	11,841	228	1,197	1,375	(1,288)	(12,192)	1,161
Provision for loan losses	(604)	—	—	—	—	—	(604)
Release of losses	114	—	—	—	—	—	114
Other non-interest expense	(11,946)	(3,118)	(2,214)	(2,330)	(9,849)	—	(29,457)
Non-interest expense ⁽⁵⁾	(11,832)	(3,118)	(2,214)	(2,330)	(9,849)	—	(29,343)
Core earnings before income taxes	29,444	11,195	6,726	32,969	(3,754)	(1,805) ⁽⁶⁾	74,775
Income tax (expense)/benefit	(10,307)	(3,918)	(2,355)	(11,538)	1,221	633	(26,264)
Core earnings before preferred stock dividends and attribution of income to non-controlling interest - preferred stock dividends	19,137	7,277	4,371	21,431	(2,533)	(1,172) ⁽⁶⁾	48,511
Preferred stock dividends	—	—	—	—	(9,886)	—	(9,886)
Non-controlling interest - preferred stock dividends	—	—	—	—	62	—	62
Segment core earnings/(losses)	\$ 19,137	\$ 7,277	\$ 4,371	\$ 21,431	\$ (12,357)	\$ (1,172) ⁽⁶⁾	\$ 38,687
Total assets at carrying value	\$ 3,436,641	\$ 2,062,195	\$ 1,008,903	\$ 6,045,227	\$ 3,447,939	\$ —	\$ 16,000,905
Total on- and off-balance sheet program assets at principal balance	\$ 6,004,728	\$ 2,020,834	\$ 1,867,666	\$ 7,354,511		—	\$ 17,247,739

- ⁽¹⁾ Excludes 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 and hedging activities" on the consolidated financial statements, to determine the effective funding cost for each operating segment.
- ⁽⁴⁾ Includes reconciling adjustments for fair value adjustments on financial derivatives and trading assets. Also includes a reconciling adjustment related to the recognition of deferred gains over the estimated lives of certain Farmer Mac Guaranteed Securities and USDA Securities.
- ⁽⁵⁾ Includes directly attributable costs and an allocation of indirectly attributable costs based on headcount.
- ⁽⁶⁾ 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 and attribution of income to non-controlling interest reconciled to net income; and segment core earnings reconciled to net income attributable to common stockholders.

Core Earnings by Business Segment
For the Nine Months Ended September 30, 2015

	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
	(in thousands)						
Net interest income	\$ 32,825	\$ 13,503	\$ 8,741	\$ 33,990	\$ 5,777	\$ —	\$ 94,836
Less: reconciling adjustments ⁽¹⁾⁽²⁾⁽³⁾	(3,402)	(182)	(192)	(1,434)	(195)	5,405	—
Net effective spread	29,423	13,321	8,549	32,556	5,582	5,405	—
Guarantee and commitment fees ⁽²⁾	11,111	9	100	1,205	—	(2,128)	10,297
Other income/(expense) ⁽³⁾⁽⁴⁾	760	100	—	—	(1,383)	3,927	3,404
Non-interest income/(loss)	11,871	109	100	1,205	(1,383)	1,799	13,701
Release of allowance for loan losses	978	—	—	—	—	—	978
Provision for losses	(1,235)	—	—	—	—	—	(1,235)
Other non-interest expense	(12,858)	(2,396)	(2,564)	(1,589)	(8,975)	—	(28,382)
Non-interest expense ⁽⁵⁾	(14,093)	(2,396)	(2,564)	(1,589)	(8,975)	—	(29,617)
Core earnings before income taxes	28,179	11,034	6,085	32,172	(4,776)	7,204 ⁽⁶⁾	79,898
Income tax (expense)/benefit	(9,862)	(3,861)	(2,129)	(11,260)	3,405	(620)	(24,327)
Core earnings before preferred stock dividends and attribution of income to non-controlling interest - preferred stock dividends	18,317	7,173	3,956	20,912	(1,371)	6,584 ⁽⁶⁾	55,571
Preferred stock dividends	—	—	—	—	(9,886)	—	(9,886)
Non-controlling interest - preferred stock dividends	—	—	—	—	(5,199)	—	(5,199)
Loss on retirement of preferred stock	—	—	—	—	—	(8,147)	(8,147)
Segment core earnings/(losses)	<u>\$ 18,317</u>	<u>\$ 7,173</u>	<u>\$ 3,956</u>	<u>\$ 20,912</u>	<u>\$ (16,456)</u>	<u>\$ (1,563) ⁽⁶⁾</u>	<u>\$ 32,339</u>
Total assets at carrying value	\$ 2,856,097	\$ 1,941,166	\$ 987,115	\$ 5,405,360	\$ 3,664,107	\$ —	\$ 14,853,845
Total on- and off-balance sheet program assets at principal balance	\$ 5,504,030	\$ 1,898,625	\$ 1,500,307	\$ 6,725,017		—	\$ 15,627,979

⁽¹⁾ Excludes 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 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 and hedging activities" on the consolidated financial statements, to determine the effective funding cost for each operating segment.

⁽⁴⁾ Includes reconciling adjustments for fair value adjustments on financial derivatives and trading assets. Also includes a reconciling adjustment related to the recognition of deferred gains over the estimated lives of certain Farmer Mac Guaranteed Securities and USDA Securities.

⁽⁵⁾ Includes directly attributable costs and an allocation of indirectly attributable costs based on headcount.

⁽⁶⁾ 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 and attribution of income to non-controlling interest 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

Financial information included in this report is consolidated to include the accounts of Farmer Mac and its three subsidiaries – Farmer Mac Mortgage Securities Corporation, Farmer Mac II LLC, and Contour Valuation Services, LLC (which began doing business as AgVisory during first quarter 2016) ("AgVisory"). 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, 2015 filed with the SEC on March 10, 2016.

FORWARD-LOOKING STATEMENTS

Some statements made in this report, and in particular in the "Management's Discussion & Analysis of Financial Condition and Results of Operations" section, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 pertaining to management's current expectations as to Farmer Mac's future financial results, business prospects, and business developments. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate, or imply future results, performance, or achievements. These statements typically are accompanied by, and identified with, terms such as "anticipates," "believes," "expects," "intends," "plans," "potential," "may," "should," and similar phrases. This report includes forward-looking statements addressing Farmer Mac's:

- prospects for earnings;
- prospects for growth in business volume;
- trends in net interest income and net effective spread;
- trends in portfolio credit quality, delinquencies, and provisions for losses;
- trends in expenses;
- trends in investment securities;
- prospects for asset impairments and allowance for losses;
- changes in capital position; and
- other business and financial matters.

Management's expectations for Farmer Mac's future necessarily involve a number of assumptions and 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 Part I, Item 1A of Farmer Mac's Annual Report on Form 10-K for the fiscal period ended December 31, 2015 filed with the SEC on March 10, 2016, and uncertainties regarding:

- the availability to Farmer Mac of debt and equity financing and, if available, the reasonableness of rates and terms;
- legislative or regulatory developments that could affect Farmer Mac, its sources of business, or the agricultural or rural utilities industries;
- fluctuations in the fair value of assets held by Farmer Mac and its subsidiaries;

- the rate and direction of development of the secondary market for agricultural mortgage and rural utilities loans, including 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 impact of economic conditions, including the effects of drought and other weather-related conditions and fluctuations in agricultural real estate values, on agricultural mortgage lending and borrower repayment capacity;
- developments in the financial markets, including possible investor, analyst, and rating agency reactions to events involving government-sponsored enterprises, including Farmer Mac;
- changes in the level and direction of interest rates, which could, among other things, affect the value of collateral securing Farmer Mac's agricultural mortgage loan assets;
- the degree to which Farmer Mac is exposed to basis risk, which results from fluctuations in Farmer Mac's borrowing costs relative to market indexes such as LIBOR; and
- volatility in commodity prices relative to costs of production and/or export demand for U.S. agricultural products.

In light of these potential risks and uncertainties, no undue reliance should be placed on any forward-looking statements expressed in this report. Furthermore, Farmer Mac undertakes no obligation to release publicly the results of revisions to any forward-looking statements that may be made to reflect new information or any future events or circumstances, except as otherwise mandated by the SEC. The information contained in this report is not necessarily indicative of future results.

Overview

In third quarter 2016, Farmer Mac increased its outstanding business volume by \$0.1 billion, to \$17.2 billion, driven primarily by net portfolio growth of \$149.9 million in Farm & Ranch loans and \$60.5 million in USDA Securities. Farmer Mac's overall credit quality remained stable during third quarter 2016, as the total allowance for losses remained relatively unchanged from second quarter 2016, substandard assets increased modestly, and 90-day delinquencies decreased. The discussion below of Farmer Mac's financial information includes measures of financial performance that are not presented in accordance with generally accepted accounting principles in the United States (GAAP), and these are considered "non-GAAP" measures. 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

Farmer Mac's net income attributable to common stockholders for third quarter 2016 was \$16.4 million, compared to \$8.4 million for third quarter 2015. The increase was primarily attributable to the effects of unrealized fair value changes on financial derivatives and hedged assets, which was a \$0.9 million after-tax gain in third quarter 2016, compared to a \$4.5 million after-tax loss in third quarter 2015. For more information about changes in net income attributable to common stockholders, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations."

Farmer Mac's non-GAAP core earnings for third quarter 2016 were \$14.4 million, compared to \$13.0 million in second quarter 2016 and \$13.2 million in third quarter 2015.

The \$1.4 million sequential quarterly increase in core earnings was primarily attributable to a \$0.8 million after-tax increase in net effective spread. Also contributing to the increase was a decrease in credit-related expenses resulting from net releases from the allowance for losses of \$20,000 after-tax in third quarter 2016 compared to net provisions of \$0.3 million after-tax in second quarter 2016. Operating expenses also decreased sequentially by \$0.3 million after-tax, driven by lower general and administrative and compensation and benefits expenses. The decrease in general and administrative expenses was driven by a decrease in legal and accounting fees. The decrease in compensation and benefits expenses was due to seasonally higher payroll taxes during second quarter 2016 related to payouts of variable incentive compensation which did not recur during third quarter 2016.

The year-over-year \$1.2 million increase in core earnings was primarily attributable to an increase in net effective spread of \$1.2 million after-tax and an increase in guarantee and commitment fee income of \$0.1 million after-tax. The increase was offset in part by an increase of \$0.1 million after-tax in credit-related expenses due to a decrease in the release from the allowance for losses in third quarter 2016 compared to third quarter 2015. Operating expenses were flat between third quarter 2016 and third quarter 2015, as lower general and administrative expenses were offset by an increase in compensation and benefits expenses. The lower general and administrative expenses were attributable to a decrease in legal fees and outside professional services fees for application and information systems consulting. The higher compensation and benefits expenses resulted from an increase in headcount and employee health insurance costs.

Fair value changes on derivatives do not affect core earnings. For more information about 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

Net interest income was \$35.6 million in third quarter 2016 compared to \$32.2 million in third quarter 2015. In percentage terms, net interest income for third quarter 2016 was 0.89 percent compared to 0.90 percent in third quarter 2015. The year-over-year increase in dollars was due to several factors. One factor was the impact of an increase in short-term interest rates on assets and liabilities indexed to LIBOR due to the Federal Reserve's decision to raise the target range for the federal funds rate in fourth quarter 2015. This effect on net interest income occurred because interest expense used to calculate net interest income does not include all the funding expenses related to these assets, specifically the expense on undesignated financial derivatives. Alternatively, the increase in short-term rates on assets and liabilities indexed to LIBOR would not have a similar effect on net effective spread as described below because net effective spread includes interest expense from all funding related to such assets, including interest expense from undesignated financial derivatives. Also contributing to the year-over-year increase in net interest income was (1) growth in outstanding business volume, (2) a wider spread on a large AgVantage security that was refinanced in third quarter 2016 as compared to the original security, and (3) an increase in the net effect of consolidated trusts due to an increase in securitization activity of Farm & Ranch loans during 2015 and the first nine months of 2016. Farmer Mac earns the difference between the interest income recognized on loans in consolidated trusts and the related interest expense recognized on debt securities of consolidated trusts held by third parties. The year-over-year decrease in net interest income in percentage terms primarily related to a higher average balance maintained in lower-earning cash and

investment securities in third quarter 2016 compared to third quarter 2015 to increase Farmer Mac's liquidity position and to a tighter spread on a large AgVantage security that was refinanced in first quarter 2016 at a shorter maturity than the original security.

Net effective spread, a non-GAAP measure, was \$32.2 million in third quarter 2016, compared to \$31.0 million in second quarter 2016 and \$30.4 million in third quarter 2015. In percentage terms, net effective spread for third quarter 2016 was 0.86 percent, compared to 0.84 percent in second quarter 2016 and 0.88 percent in third quarter 2015. Farmer Mac uses net effective spread as an alternative measure to net interest income because management believes it is a useful metric that accurately 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 reflected in net interest income under 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."

The sequential increase in quarterly net effective spread in dollar terms was primarily due to (1) continued improvement in third quarter 2016 of LIBOR-based funding costs for floating rate assets indexed to LIBOR due to adjustments in Farmer Mac's funding strategies for these types of assets and some improvement in the LIBOR-based funding market, (2) growth in average outstanding business volume, and (3) a wider spread on a large AgVantage security that was refinanced during third quarter 2016. The sequential increase in quarterly net effective spread in percentage terms was primarily due to the improvement in third quarter 2016 of LIBOR-based funding costs and a wider spread on a large AgVantage security that was refinanced during third quarter 2016.

The year-over-year increase in net effective spread in dollar terms was primarily attributable to growth in average outstanding business volume and a wider spread on a large AgVantage security that was refinanced during third quarter 2016. The year-over-year decrease in quarterly net effective spread in percentage terms was due to a higher average balance maintained in lower-earning cash and investment securities in third quarter 2016 compared to third quarter 2015 to increase Farmer Mac's liquidity position, partially offset by the increase in spread on a large AgVantage security that was refinanced during third quarter 2016.

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

Business Volume

Farmer Mac added \$1.1 billion of new business volume during third quarter 2016. The new business volume included purchases of \$528.2 million of AgVantage securities, purchases of \$282.7 million of newly originated Farm & Ranch loans, Farm & Ranch loans added under LTSPCs of \$155.7 million, purchases of \$87.3 million of USDA Securities, issuance of \$31.9 million of Farmer Mac Guaranteed USDA Securities, and purchases of Rural Utilities loans of \$20.0 million. The new business volume in AgVantage securities included a \$500.0 million AgVantage security which was used to refinance an AgVantage security that matured in third quarter 2016. Taking into account maturities and paydowns on existing assets, Farmer Mac's outstanding business volume was \$17.2 billion as of September 30, 2016, an increase of \$0.1 billion from June 30, 2016, \$1.3 billion from December 31, 2015, and \$1.6 billion from September 30, 2015.

Capital

As of September 30, 2016, Farmer Mac's core capital level was \$587.1 million, \$112.3 million above the minimum capital level required by Farmer Mac's statutory charter. As of December 31, 2015, Farmer Mac's core capital level was \$564.5 million, which was \$102.4 million above the minimum capital requirement. The increase in capital in excess of the minimum capital level was due primarily to a decrease in the amount of cash and investment securities needed to manage Farmer Mac's liquidity position in third quarter 2016 and an increase in retained earnings.

Farmer Mac's board of directors approved a share repurchase program during third quarter 2015 authorizing Farmer Mac to repurchase up to \$25 million of its outstanding Class C non-voting common stock through September 2017. Farmer Mac did not repurchase any shares during third quarter 2016 under this program. As of September 30, 2016, Farmer Mac had repurchased approximately 668,000 shares of Class C non-voting common stock at a cost of approximately \$19.6 million under the share repurchase program.

Credit Quality

Farmer Mac continued to maintain stable credit quality, as substandard assets increased modestly in terms of both dollars and percentage of the Farm & Ranch portfolio, while the total allowance for losses decreased modestly in terms of both dollars and percentage of the Farm & Ranch portfolio from their respective levels as of June 30, 2016. The release from the total allowance for losses of \$31,000 during third quarter 2016 primarily related to the release of a specific reserve on an impaired livestock loan underlying an LTSPC that was required to be removed from the LTSPC pool by the originator during third quarter 2016, partially offset by an increase in the general allowance due to overall net volume growth in on-balance sheet Farm & Ranch loans.

As of September 30, 2016, Farmer Mac's 90-day delinquencies were \$18.4 million (0.31 percent of the Farm & Ranch portfolio), compared to \$32.1 million (0.56 percent of the Farm & Ranch portfolio) as of December 31, 2015, and \$36.7 million (0.67 percent of the Farm & Ranch portfolio) as of September 30, 2015. The decrease in 90-day delinquencies from year-end primarily related to (1) the workout in January 2016 of two Agricultural Storage and Processing loans that financed one canola facility and (2) the receipt by Farmer Mac of funds in the amount of \$5.0 million and \$1.0 million, respectively, to pay off two long-standing delinquent timber loans with the same borrower. For more information about Farmer Mac's credit metrics, including 90-day delinquencies, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk – Loans and Guarantees."

Use of Non-GAAP Measures

In the accompanying analysis of its financial information, Farmer Mac sometimes uses measures of financial performance that are not presented in accordance with generally accepted accounting principles in the United States (GAAP), and these are considered "non-GAAP measures." 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

Core earnings and core earnings per share principally differ from net income attributable to common stockholders and earnings per common share, respectively, by excluding the effects of fair value fluctuations. These fluctuations are not expected to have a cumulative net impact on financial condition or results of operations reported in accordance with GAAP if the related financial instruments are held to maturity, as is generally expected. Core earnings and core earnings per share also differ from net income attributable to common stockholders and earnings per common share, respectively, by excluding specified infrequent or unusual transactions that Farmer Mac believes 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, the loss from retirement of the Farmer Mac II LLC Preferred Stock in first quarter 2015 has been excluded from core earnings and core earnings per share because it is not a frequently occurring transaction and not indicative of future operating results. This is also consistent with Farmer Mac's previous treatment of these types of origination costs associated with securities underwriting that are capitalized and deferred during the life of the security. 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. Net effective spread differs from net interest income and net interest yield because it excludes: (1) the amortization of premiums and discounts on assets consolidated at fair value that are amortized as adjustments to yield in interest income over the contractual or estimated remaining lives of the underlying assets, and (2) interest income and interest expense related to consolidated trusts with beneficial interests owned by third parties, which are presented on Farmer Mac's consolidated balance sheets as "Loans held for investment in consolidated trusts, at amortized cost." 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 generally 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 for purposes of determining Farmer Mac's core earnings.

Net effective spread also principally 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 and hedging activities" 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, which is intended to reflect management's view of the net spread between an asset and all of its related funding, including any associated derivatives, whether or not they are in a hedge accounting relationship. For a reconciliation of net interest income and net interest yield to net effective spread, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Net Interest Income."

Results of Operations

Farmer Mac's net income attributable to common stockholders for the three months ended September 30, 2016 was \$16.4 million, or \$1.54 per diluted common share, compared to \$8.4 million, or \$0.74 per diluted common share, for the same period in 2015. For the nine months ended September 30, 2016, Farmer Mac's net income attributable to common stockholders was \$38.7 million, or \$3.60 per diluted common share, compared to \$32.3 million, or \$2.85 per diluted common share, for the same period in 2015. Farmer Mac's non-GAAP core earnings for the three months ended September 30, 2016 were \$14.4 million, or \$1.36 per diluted common share, compared to \$13.2 million, or \$1.17 per diluted common share, for the same period in 2015. Farmer Mac's non-GAAP core earnings for the nine months ended September 30, 2016 were \$39.9 million, or \$3.71 per diluted common share, compared to \$33.9 million, or \$2.99 per diluted common share, for the same period in 2015.

A reconciliation 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 a breakdown of the composition of core earnings:

Table 1

Reconciliation of Net Income Attributable to Common Stockholders to Core Earnings		
	For the Three Months Ended	
	September 30, 2016	September 30, 2015
	<i>(in thousands, except per share amounts)</i>	
Net income attributable to common stockholders	\$ 16,364	\$ 8,359
Less reconciling items:		
Unrealized gains/(losses) on financial derivatives and hedging activities	1,460	(6,906)
Unrealized gains/(losses) on trading securities	1,182	(8)
Amortization of premiums/discounts and deferred gains on assets consolidated at fair value	(157)	(117)
Net effects of settlements on agency forward contracts	464	(390)
Income tax effect related to reconciling items	(1,032)	2,598
Sub-total	1,917	(4,823)
Core earnings	\$ 14,447	\$ 13,182
Composition of Core Earnings:		
Revenues:		
Net effective spread ⁽¹⁾	\$ 32,199	\$ 30,387
Guarantee and commitment fees ⁽²⁾	4,533	4,328
Other ⁽³⁾	(32)	(93)
Total revenues	36,700	34,622
Credit related (income)/expense (GAAP):		
Releases of losses	(31)	(303)
REO operating expenses	—	48
Gains on sale of REO	(15)	—
Total credit related (income)/expense	(46)	(255)
Operating expenses (GAAP):		
Compensation and employee benefits	5,438	5,236
General and administrative	3,474	3,676
Regulatory fees	613	600
Total operating expenses	9,525	9,512
Net earnings	27,221	25,365
Income tax expense ⁽⁴⁾	9,497	8,924
Net loss attributable to non-controlling interest (GAAP)	(18)	(36)
Preferred stock dividends (GAAP)	3,295	3,295
Core earnings	\$ 14,447	\$ 13,182
Core earnings per share:		
Basic	\$ 1.38	\$ 1.20
Diluted	1.36	1.17
Weighted-average shares:		
Basic	10,473	11,028
Diluted	10,649	11,271

⁽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 6 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 fair value adjustments on financial derivatives and trading assets and a reconciling adjustment to exclude 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 Nine Months Ended	
	September 30, 2016	September 30, 2015
	<i>(in thousands, except per share amounts)</i>	
Net income attributable to common stockholders	\$ 38,687	\$ 32,339
Less reconciling items:		
Unrealized (losses)/gains on financial derivatives and hedging activities	(3,605)	8,181
Unrealized gains on trading securities	1,934	524
Amortization of premiums/discounts and deferred gains on assets consolidated at fair value	(809)	(1,056)
Net effects of settlements on agency forward contracts	675	(445)
Loss on retirement of Farmer Mac II LLC Preferred Stock ⁽¹⁾	—	(8,147)
Income tax effect related to reconciling items	633	(620)
Sub-total	(1,172)	(1,563)
Core earnings	\$ 39,859	\$ 33,902
Composition of Core Earnings:		
Revenues:		
Net effective spread ⁽²⁾	\$ 93,174	\$ 89,431
Guarantee and commitment fees ⁽³⁾	14,012	12,425
Other ⁽⁴⁾	(674)	(522)
Total revenues	106,512	101,334
Credit related expense (GAAP):		
Provision for losses	490	257
REO operating expenses	39	47
(Gains)/losses on sale of REO	(15)	1
Total credit related expense	514	305
Operating expenses (GAAP):		
Compensation and employee benefits	16,823	16,662
General and administrative	10,757	9,873
Regulatory fees	1,838	1,800
Total operating expenses	29,418	28,335
Net earnings	76,580	72,694
Income tax expense ⁽⁵⁾	26,897	23,707
Net (loss)/income attributable to non-controlling interest (GAAP)	(62)	5,199
Preferred stock dividends (GAAP)	9,886	9,886
Core earnings	\$ 39,859	\$ 33,902
Core earnings per share:		
Basic	\$ 3.81	\$ 3.08
Diluted	3.71	2.99
Weighted-average shares:		
Basic	10,464	10,992
Diluted	10,755	11,347

⁽¹⁾ Relates to the write-off of deferred issuance costs as a result of the retirement of Farmer II LLC Preferred Stock.

⁽²⁾ 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 6 for a reconciliation of net interest income to net effective spread.

- (3) 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.
- (4) Reflects reconciling adjustments for the reclassification to exclude expenses related to interest rate swaps not designated as hedges and fair value adjustments on financial derivatives and trading assets and a reconciling adjustment to exclude the recognition of deferred gains over the estimated lives of certain Farmer Mac Guaranteed Securities and USDA Securities.
- (5) Includes the tax impact of non-GAAP reconciling items between net income attributable to common stockholders and core earnings.

Table 2
Reconciliation of GAAP Basic Earnings Per Share to Core Earnings Basic Earnings Per Share

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
<i>(in thousands, except per share amounts)</i>				
GAAP - Basic EPS	\$ 1.56	\$ 0.76	\$ 3.70	\$ 2.94
Less reconciling items:				
Unrealized gains/(losses) on financial derivatives and hedging activities	0.14	(0.63)	(0.33)	0.75
Unrealized gains on trading securities	0.11	—	0.18	0.05
Amortization of premiums/discounts and deferred gains on assets consolidated at fair value	(0.01)	(0.01)	(0.08)	(0.10)
Net effects of settlements on agency forward contracts	0.04	(0.04)	0.06	(0.04)
Loss on retirement of Farmer Mac II LLC Preferred Stock	—	—	—	(0.74)
Income tax effect related to reconciling items	(0.10)	0.24	0.06	(0.06)
Sub-total	0.18	(0.44)	(0.11)	(0.14)
Core Earnings - Basic EPS	\$ 1.38	\$ 1.20	\$ 3.81	\$ 3.08
Shares used in per share calculation (GAAP and Core Earnings)	10,473	11,028	10,464	10,992

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

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
<i>(in thousands, except per share amounts)</i>				
GAAP - Diluted EPS	\$ 1.54	\$ 0.74	\$ 3.60	\$ 2.85
Less reconciling items:				
Unrealized gains/(losses) on financial derivatives and hedging activities	0.14	(0.62)	(0.34)	0.71
Unrealized gains on trading securities	0.11	—	0.18	0.05
Amortization of premiums/discounts and deferred gains on assets consolidated at fair value	(0.01)	(0.01)	(0.07)	(0.09)
Net effects of settlements on agency forward contracts	0.04	(0.03)	0.06	(0.04)
Loss on retirement of Farmer Mac II LLC Preferred Stock	—	—	—	(0.72)
Income tax effect related to reconciling items	(0.10)	0.23	0.06	(0.05)
Sub-total	0.18	(0.43)	(0.11)	(0.14)
Core Earnings - Diluted EPS	\$ 1.36	\$ 1.17	\$ 3.71	\$ 2.99
Shares used in per share calculation (GAAP and Core Earnings)	10,649	11,271	10,755	11,347

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

1. Unrealized (losses)/gains on financial derivatives and hedging activities. The table below calculates the non-GAAP reconciling item for unrealized (losses)/gains on financial derivatives and hedging activities.

Table 3

Non-GAAP Reconciling Item for Unrealized (Losses)/Gains on Financial Derivatives and Hedging Activities				
	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	(in thousands)			
Fair value hedges:				
Unrealized gains on fair value hedges (see Table 8)	\$ 726	\$ 3,188	\$ 5,716	\$ 9,026
No hedge designation:				
Unrealized gains/(losses) due to fair value changes (see Table 8)	734	(10,094)	(9,321)	(845)
Unrealized gains/(losses) on financial derivatives and hedging activities	\$ 1,460	\$ (6,906)	\$ (3,605)	\$ 8,181

2. Unrealized gains on trading securities. The unrealized gains 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. 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 effect of settlements on agency forward contracts. These agency forward contracts are used as a short-term economic hedge of the issuance of debt. For GAAP purposes, realized gains or losses on settlements of agency forward contracts used as a short-term hedge of the issuance of debt are reported in the consolidated statements of operations in the period in which they occur. For core earnings purposes, these realized gains or losses on settlements of agency forward contracts are deferred and amortized as yield adjustments over the term of the related debt, which generally ranges from 3 to 15 years.

5. The loss on retirement of the Farmer Mac II LLC Preferred Stock. This loss in first quarter 2015 has been excluded from core earnings because it is not a frequently occurring transaction and is not indicative of future operating results. This is also consistent with Farmer Mac's previous treatment of these types of origination costs associated with securities underwriting that are capitalized and deferred during the life of the security.

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

Net Interest Income. The following table provides information regarding interest-earning assets and funding for the nine months ended September 30, 2016 and 2015. 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 4

	For the Nine Months Ended					
	September 30, 2016			September 30, 2015		
	Average Balance	Income/ Expense	Average Rate	Average Balance	Income/ Expense	Average Rate
	(dollars in thousands)					
Interest-earning assets:						
Cash and investments	\$ 3,726,766	\$ 20,235	0.72%	\$ 3,227,893	\$ 9,144	0.38%
Loans, Farmer Mac Guaranteed Securities and USDA Securities ⁽¹⁾	11,001,241	187,466	2.27%	10,439,224	173,911	2.22%
Total interest-earning assets	14,728,007	207,701	1.88%	13,667,117	183,055	1.79%
Funding:						
Notes payable due within one year	7,481,541	27,380	0.49%	5,711,356	8,343	0.19%
Notes payable due after one year ⁽²⁾	6,826,348	79,693	1.56%	7,422,810	82,004	1.47%
Total interest-bearing liabilities ⁽³⁾	14,307,889	107,073	1.00%	13,134,166	90,347	0.92%
Net non-interest-bearing funding	420,118	—		532,951	—	
Total funding	14,728,007	107,073	0.97%	13,667,117	90,347	0.88%
Net interest income/yield prior to consolidation of certain trusts	14,728,007	100,628	0.91%	13,667,117	92,708	0.90%
Net effect of consolidated trusts ⁽⁴⁾	848,344	2,933	0.46%	503,609	2,128	0.56%
Net interest income/yield	\$15,576,351	\$ 103,561	0.89%	\$14,170,726	\$ 94,836	0.89%

⁽¹⁾ Excludes interest income of \$23.0 million and \$14.2 million in the first nine months of 2016 and 2015, 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 \$20.0 million and \$12.1 million in the first nine months of 2016 and 2015, 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.

Net interest income was \$103.6 million for the nine months ended September 30, 2016 compared to \$94.8 million for the same period in 2015. The overall net interest yield was 89 basis points for both the nine months ended September 30, 2016 and September 30, 2015.

The \$8.8 million increase in net interest income for the nine months ended September 30, 2016 compared to the same period in 2015 was due to several factors. One factor was the impact of an increase in short-term interest rates on assets and liabilities indexed to LIBOR due to the Federal Reserve's decision to raise the target range for the federal funds rate in fourth quarter 2015. This effect on net interest income occurred because interest expense used to calculate net interest income does not include all the funding expenses related to these assets, specifically the expense on undesignated financial derivatives.

Alternatively, the increase in short-term rates on assets and liabilities indexed to LIBOR would not have a similar effect on net effective spread because net effective spread includes interest expense from all funding related to such assets, including interest expense from undesignated financial derivatives.

Another factor contributing to the year-over-year increase in net interest income was an increase in the average outstanding balance of Farm & Ranch loans, USDA Securities, and AgVantage securities. Also

contributing to the increase was (1) a decrease in net yield adjustments related to amortization of premiums and discounts on assets consolidated at fair value driven by slower prepayments on those assets, (2) a wider spread on a large AgVantage security that was refinanced in third quarter 2016 as compared to the original security, and (3) an increase in the net effect of consolidated trusts due to an increase in securitization activity of Farm & Ranch loans during 2015 and the first nine months of 2016. Farmer Mac earns the difference between the interest income recognized on loans in consolidated trusts and the related interest expense recognized on debt securities of consolidated trusts held by third parties. The increase was offset in part by (1) an increase in yield adjustments from amortization of purchase premiums on certain Farm & Ranch loans and (2) a tighter spread on a large AgVantage security that was refinanced in first quarter 2016 at a shorter maturity than the original security.

The following table sets forth information regarding 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). Combined rate/volume variances, the third element of the calculation, are allocated based on their relative size.

Table 5

	For the Nine Months Ended September 30, 2016 Compared to Same Period 2015		
	Increase/(Decrease) Due to		
	Rate	Volume	Total
	(in thousands)		
Income from interest-earning assets:			
Cash and investments	\$ 9,491	\$ 1,600	\$ 11,091
Loans, Farmer Mac Guaranteed Securities and USDA Securities	4,041	9,514	13,555
Total	13,532	11,114	24,646
Expense from other interest-bearing liabilities	8,295	8,431	16,726
Change in net interest income prior to consolidation of certain trusts ⁽¹⁾	\$ 5,237	\$ 2,683	\$ 7,920

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

For the nine months ended September 30, 2016 compared to the same period in 2015, the increase in income on interest-earning assets and the increase in expense on other interest-bearing liabilities due to changes in rate resulted from the repricing of both interest-earning assets and interest-bearing liabilities due to the Federal Reserve's decision to raise the target range for the federal funds rate in fourth quarter 2015. The increase in income due to changes in rate on loans, Farmer Mac Guaranteed Securities, and USDA Securities was due to a decrease in net yield adjustments related to amortization of premiums and discounts on assets consolidated at fair value driven by slower prepayments on those assets in the first nine months of 2016. That increase in income was offset in part by a decline in market rates on AgVantage securities acquired or refinanced during 2015 and the first nine months of 2016 and an increase in yield adjustments from amortization of purchase premiums on certain Farm & Ranch loans. The increases in income from interest-earning assets and in expense from other interest-bearing liabilities due to changes in volume reflect the increase in the average balance of on-balance sheet assets and the related funding for those assets, respectively.

The following table presents a reconciliation of net interest income and net yield to net effective spread. This spread is measured by including income or expense related to contractual amounts due on undesignated financial derivatives (the income or expense related to financial derivatives designated in hedge accounting relationships is already included in net interest income) and excluding the amortization of premiums and discounts on assets consolidated at fair value and the net effects of consolidated trusts with beneficial interests owned by third parties.

Table 6

	For the Three Months Ended				For the Nine Months Ended			
	September 30, 2016		September 30, 2015		September 30, 2016		September 30, 2015	
	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield
	<i>(dollars in thousands)</i>							
Net interest income/yield	\$ 35,563	0.89 %	\$ 32,183	0.90 %	\$ 103,561	0.89 %	\$ 94,836	0.89 %
Net effects of consolidated trusts	(735)	0.04 %	(796)	0.01 %	(2,933)	0.02 %	(2,128)	0.01 %
Expense related to undesignated financial derivatives	(2,807)	(0.08)%	(1,651)	(0.05)%	(7,985)	(0.07)%	(5,239)	(0.05)%
Amortization of premiums/discounts on assets consolidated at fair value	178	0.01 %	651	0.02 %	531	— %	1,962	0.02 %
Net effective spread	<u>\$ 32,199</u>	<u>0.86 %</u>	<u>\$ 30,387</u>	<u>0.88 %</u>	<u>\$ 93,174</u>	<u>0.84 %</u>	<u>\$ 89,431</u>	<u>0.87 %</u>

Net effective spread was \$32.2 million and \$93.2 million for the three and nine months ended September 30, 2016 compared to \$30.4 million and \$89.4 million for the same periods in 2015, respectively. In percentage terms, net effective spread for the three and nine months ended September 30, 2016 was 0.86 percent and 0.84 percent, respectively, compared to 0.88 percent and 0.87 percent for the same periods in 2015, respectively.

For the first nine months of 2016 compared to the same period in 2015, the contraction in net effective spread in percentage terms was primarily attributable to (1) market increases in LIBOR-based short-term funding costs which primarily impacted first quarter 2016, (2) a tighter spread on a large AgVantage security that was refinanced in first quarter 2016 at a shorter maturity than the original security, (3) a higher average balance in lower-earning cash and investment securities in the first nine months of 2016 compared to the same period in 2015 to increase Farmer Mac's liquidity position, and (4) an increase in yield adjustments from amortization of purchase premiums on certain Farm & Ranch loans. Additionally, net effective spread was negatively impacted by the decrease in net non-interest bearing funding in the first nine months of 2016 compared to the same period last year due to the redemption of Farmer Mac II LLC Preferred Stock on March 30, 2015, as certain interest-earning assets which were previously funded with capital during first quarter 2015 are currently being funded with interest-bearing liabilities. The year-over-year increase in dollars was primarily attributable to growth in outstanding business volume and a wider spread on a large AgVantage security that was refinanced during third quarter 2016 as compared to the original security.

See Note 9 to the consolidated financial statements for more information regarding net interest income and net effective spread from Farmer Mac's individual business segments. Additionally, see "—Supplemental Information" for quarterly net effective spread by line of business.

Provision for and Release of Allowance for Loan Losses and Reserve for Losses. The following table summarizes the components of Farmer Mac's total allowance for losses for the three and nine months ended September 30, 2016 and 2015:

Table 7

	As of September 30, 2016			As of September 30, 2015		
	Allowance for Loan Losses	Reserve for Losses	Total Allowance for Losses	Allowance for Loan Losses	Reserve for Losses	Total Allowance for Losses
	(in thousands)					
For the Three Months Ended:						
Beginning Balance	\$ 4,893	\$ 2,191	\$ 7,084	\$ 5,939	\$ 4,637	\$ 10,576
Provision for/(release of) losses	191	(222)	(31)	(1,164)	861	(303)
Charge-offs	(130)	—	(130)	—	—	—
Ending Balance	<u>\$ 4,954</u>	<u>\$ 1,969</u>	<u>\$ 6,923</u>	<u>\$ 4,775</u>	<u>\$ 5,498</u>	<u>\$ 10,273</u>
For the Nine Months Ended:						
Beginning Balance	\$ 4,480	\$ 2,083	\$ 6,563	\$ 5,864	\$ 4,263	\$ 10,127
Provision for/(release of) losses	604	(114)	490	(978)	1,235	257
Charge-offs	(130)	—	(130)	(111)	—	(111)
Ending Balance	<u>\$ 4,954</u>	<u>\$ 1,969</u>	<u>\$ 6,923</u>	<u>\$ 4,775</u>	<u>\$ 5,498</u>	<u>\$ 10,273</u>

The provisions to the allowance for loan losses recorded during the three and nine months ended September 30, 2016 were attributable to an increase in the general allowance due to overall net volume growth in on-balance sheet Farm & Ranch loans and downgrades in risk ratings for a small number of loans. The provisions to the allowance for loan losses recorded during the nine months ended September 30, 2016 were also attributable to the establishment of a specific allowance for a long-standing impaired permanent planting loan due to collateral shortfalls relative to the unpaid principal balance and an increase in the specific allowance for on-balance sheet impaired loans resulting from a modest increase in the outstanding balance of such loans. The releases from the reserve for losses recognized during the three and nine months ended September 30, 2016 were attributable to the release of a specific reserve on an impaired livestock loan underlying an LTSPC that was required to be removed from the LTSPC pool by the originator during third quarter 2016 and releases in the general reserve of Agricultural Storage and Processing loans underlying LTSPCs due to paydowns of these loans at par. The releases from the reserve for losses recognized during the three and nine months ended September 30, 2016 were offset in part by provisions to the reserve for losses attributable to an increase in the general reserve due to downgrades in risk rating on certain unimpaired crop loans and permanent planting loans underlying LTSPCs.

The releases from the allowance for loan losses for the three and nine months ended September 30, 2015 were primarily attributable to a reduction in the specific allowance on a permanent planting loan based on the updated appraised value of the collateral underlying such loan. The provisions to the reserve for losses during the three and nine months ended September 30, 2015 were primarily attributable to a \$1.3 million increase in the specific reserve for two impaired loans to one borrower financing a canola facility. Both of these loans were under an LTSPC. The establishment in second quarter 2015 of a specific reserve for these loans was due to a downgrade in risk rating resulting from collateral shortfalls relative to the unpaid principal balance for such loans, and the increase in the specific reserve for these loans was due to the borrower's delinquency for 90 days or more during third quarter 2015. The provisions to the reserve for

losses during third quarter 2015 were partially offset by a decrease in the general reserve of Agricultural Storage and Processing loans underlying LTSPCs due to repayment of these loans at par.

As of September 30, 2016 and December 31, 2015, Farmer Mac's allowance for loan losses was \$5.0 million and \$4.5 million, respectively, and its reserve for losses was \$2.0 million and \$2.1 million, respectively. See Note 5 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. 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, were \$3.8 million and \$11.1 million, respectively, for the three and nine months ended September 30, 2016, compared to \$3.5 million and \$10.3 million for the same periods in 2015, respectively. The increase in guarantee and commitment fees was attributable to the addition of \$0.5 billion in third quarter 2015 and \$0.4 billion in second quarter 2016 of Rural Utilities loans under LTSPCs, offset in part by a lower average outstanding balance of off-balance sheet Farm & Ranch Guaranteed Securities.

(Losses)/Gains on Financial Derivatives and Hedging Activities. The effect of unrealized and realized gains and losses on Farmer Mac's financial derivatives and hedging activities was net losses of \$1.6 million and \$13.1 million for the three and nine months ended September 30, 2016, respectively, compared to net losses of \$9.6 million and net gains of \$0.9 million for the same periods in 2015, respectively.

The components of gains and losses on financial derivatives and hedging activities for three and nine months ended September 30, 2016 and 2015 are summarized in the following table:

Table 8

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	(in thousands)			
Fair value hedges:				
Unrealized (losses)/gains due to fair value changes:				
Financial derivatives ⁽¹⁾	\$ 11,276	\$ (12,646)	\$ (30,062)	\$ (4,330)
Hedged items	(10,550)	15,834	35,778	13,356
Unrealized gains on fair value hedging activities	726	3,188	5,716	9,026
Cash flow hedges:				
Loss recognized (ineffective portion)	(68)	(57)	(322)	(424)
Losses on cash flow hedges	(68)	(57)	(322)	(424)
No hedge designation:				
Unrealized (losses)/gains due to fair value changes	734	(10,094)	(9,321)	(845)
Realized:				
Expense related to financial derivatives	(2,739)	(1,594)	(7,663)	(4,815)
Losses due to terminations or net settlements	(254)	(1,011)	(1,489)	(2,003)
(Losses)/gains on financial derivatives not designated in hedging relationships	(2,259)	(12,699)	(18,473)	(7,663)
(Losses)/gains on financial derivatives and hedging activities	\$ (1,601)	\$ (9,568)	\$ (13,079)	\$ 939

⁽¹⁾ Included in the assessment of hedge effectiveness as of September 30, 2016, but excluded from the amounts in the table, were losses of \$1.0 million and \$4.2 million for the three and nine months ended September 30, 2016, attributable to the fair value of the swaps at the inception of the hedging relationship. Accordingly, the amounts recognized as hedge ineffectiveness for the three and nine months ended September 30, 2016 were losses of \$0.2 million and gains of \$1.5 million, respectively. The comparable amounts as of September 30, 2015 were losses of \$2.9 million and \$8.6 million for the three and nine months ended September 30, 2015, attributable to the fair value of the swaps at the inception of the hedging relationship and, accordingly, gains of \$0.3 million and \$0.4 million, respectively, for the three and nine months ended September 30, 2015, attributable to hedge ineffectiveness.

Changes in the fair values of Farmer Mac's open derivative positions for both designated and undesignated hedges are captured in the table above in unrealized losses due to fair value changes and are primarily the result of fluctuations in long-term interest rates. For financial derivatives designated in fair value hedge accounting relationships, changes in the fair values of the hedged items attributable to the hedged risk are also included in the table above in unrealized (losses)/gains due to fair value changes. For financial derivatives designated in cash flow hedge accounting relationships, the ineffective portion of changes in fair value are included as losses on cash flow hedges. The accrual of periodic cash settlements for interest paid or received from Farmer Mac's interest rate swaps that are not designated in hedge accounting relationships is shown as expense related to financial derivatives. Payments or receipts to terminate derivative positions or net cash settled forward sales contracts on the debt of other GSEs and U.S. Treasury futures that are not designated in hedge accounting relationships are included in losses due to terminations or net settlements.

Gains on Trading Securities. During the three and nine months ended September 30, 2016, Farmer Mac recorded unrealized gains on trading securities of \$1.2 million and \$1.9 million, respectively, compared to unrealized losses of \$8,000 and unrealized gains of \$0.5 million during the same periods in 2015, respectively. Of the total gains recognized during the three and nine months ended September 30, 2016, \$0.4 million of losses and \$0.2 million of gains related to financial assets selected to be carried at fair

value with changes in fair value included in earnings (the fair value option), compared to recorded losses of \$0.1 million and gains of \$0.1 million during the same period in 2015.

Other Income. Other income totaled \$0.7 million and \$1.2 million, respectively, for the three and nine months ended September 30, 2016, compared to \$1.1 million and \$1.9 million for the same periods in 2015. Other income during the three and nine months ended September 30, 2016 included the recognition of \$0.3 million and \$0.8 million, respectively, of appraisal fees received by Farmer Mac's consolidated appraisal company subsidiary, AgVisory, which was formed in fourth quarter 2014 compared to \$0.3 million and \$0.4 million for the same periods in 2015. Other income during the three and nine months ended September 30, 2016 also included the recognition of \$0.1 million of gains and \$0.3 million of losses, respectively, previously deferred in accumulated other comprehensive income related to fair value changes of certain available-for-sale securities contributed to Farmer Mac II LLC in 2010 and other miscellaneous items, compared to the recognition of \$0.5 million and \$0.9 million, respectively, of previously deferred gains for the same periods in 2015.

Compensation and Employee Benefits. Compensation and employee benefits were \$5.4 million and \$16.8 million, respectively, for the three and nine months ended September 30, 2016, compared to \$5.2 million and \$16.7 million, respectively, for the same periods in 2015. The year-over-year quarterly increase in compensation and employee benefits was due primarily to an increase in headcount and employee health insurance costs. The increase for the nine months ended September 30, 2016 compared to the same period in 2015 was also due primarily to an increase in headcount and employee health insurance costs offset in part by lower payouts of variable incentive compensation awarded in second quarter 2016 compared to second quarter 2015. Compensation costs for the three and nine months ended September 30, 2016 included \$0.3 million and \$0.6 million, respectively, in compensation costs for Farmer Mac's consolidated appraisal company subsidiary, AgVisory, compared to \$0.3 million and \$0.6 million, respectively, for the same periods last year.

General and Administrative Expenses. General and administrative expenses, including legal, audit, and consulting fees, were \$3.5 million and \$10.8 million, respectively, for the three and nine months ended September 30, 2016, compared to \$3.7 million and \$9.9 million for the same periods in 2015. The decrease in general and administrative expenses for the three months ended September 30, 2016 compared to the same period last year was primarily attributable to a decrease in legal fees and outside professional services fees for application and information systems consulting. The increase in general and administrative expenses in the first nine months of 2016 compared to the first nine months of 2015 was due primarily to higher consulting fees and information services expenses related to corporate strategic initiatives, continued technology and business infrastructure investments, and expenses related to business development efforts. Additionally, general and administrative costs for the three and nine months ended September 30, 2016 included \$0.2 million and \$0.5 million, respectively, in operating expenses for Farmer Mac's consolidated appraisal company subsidiary, AgVisory, compared to \$0.1 million and \$0.3 million, respectively, for the same periods last year.

Regulatory Fees. Regulatory fees, which consist of the fees paid to FCA, were \$0.6 million and \$1.8 million, respectively, for both the three and nine months ended September 30, 2016 and 2015. FCA has advised Farmer Mac that its estimated fees for the federal fiscal year ending September 30, 2017 will increase approximately \$50,000 to \$2.5 million (\$0.625 million per federal fiscal quarter) as compared to the prior federal fiscal year. After the end of a federal government fiscal year, FCA may revise its prior year estimated assessments to reflect actual costs incurred, and has issued both additional assessments and refunds in the past.

Income Tax Expense. Income tax expense totaled \$10.5 million and \$26.3 million, respectively, for the three and nine months ended September 30, 2016, compared to income tax expense of \$6.3 million and \$24.3 million for the same periods in 2015. The increase in income tax expense in the first nine months of 2016, offset in part by lower pre-tax income, compared to the same period last year was due to two items that occurred during first quarter 2015 but did not recur during the first nine months of 2016: (1) the consolidated tax benefits recognized from the dividends declared on Farmer Mac II LLC Preferred Stock, which is included in the presentation of "Net income attributable to non-controlling interest" on the consolidated statements of operations on a pre-tax basis, and (2) the loss on retirement of the Farmer Mac II LLC Preferred Stock. These items were also the primary reasons why Farmer Mac's effective tax rate was lower than the statutory rate in the nine months ended September 30, 2015.

Loss on Retirement of Preferred Stock. On March 30, 2015, Farmer Mac II LLC redeemed all of the outstanding shares of Farmer Mac II LLC Preferred Stock, which, in turn, triggered the redemption of all of the outstanding related Farm Asset-Linked Capital Securities, or "FALConS," on that same day. As a result, Farmer Mac recognized an expense in first quarter 2015 of \$8.1 million of deferred issuance costs related to those shares of Farmer Mac II LLC Preferred Stock as "Loss on retirement of preferred stock" on the consolidated statements of operations.

Business Volume. During third quarter 2016, Farmer Mac added \$1.1 billion of new business volume compared to \$1.4 billion in third quarter 2015. Specifically, Farmer Mac:

- purchased \$528.2 million of AgVantage securities;
- purchased \$282.7 million of newly originated Farm & Ranch loans;
- added \$155.7 million of Farm & Ranch loans under LTSPCs;
- purchased \$87.3 million of USDA Securities;
- issued \$31.9 million of Farmer Mac Guaranteed USDA Securities; and
- purchased \$20.0 million of Rural Utilities loans.

Farmer Mac's outstanding business volume was \$17.2 billion as of September 30, 2016, an increase of \$131.2 million from June 30, 2016. The increase in Farmer Mac's outstanding business volume was driven by net portfolio growth of Farm & Ranch loans and USDA Securities. The new business volume in the Institutional Credit line of business included the purchase of a \$500.0 million AgVantage security from Metropolitan Life Insurance Company ("MetLife") and the purchase of \$16.0 million under Farm Equity AgVantage facilities with agricultural real estate investment funds. MetLife used the proceeds from Farmer Mac's purchase of the \$500 million AgVantage security to refinance an AgVantage security of the same amount that matured in third quarter 2016.

The following table sets forth purchases of non-delinquent eligible loans, new loans added under LTSPCs, and new guarantees during the periods indicated in the Farm & Ranch, USDA Guarantees, and Rural Utilities lines of business, as well as purchases of AgVantage securities in the Institutional Credit line of business:

Table 9

New Business Volume – Farmer Mac Loan Purchases, Guarantees, LTSPCs, and AgVantage Securities				
	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	(in thousands)			
Farm & Ranch:				
Loans	\$ 282,690	\$ 175,965	\$ 722,331	\$ 503,116
LTSPCs	155,657	79,621	281,830	241,876
USDA Guarantees:				
USDA Securities	87,335	91,374	293,286	291,981
Farmer Mac Guaranteed USDA Securities	31,866	—	58,628	12,512
Rural Utilities:				
Loans	20,000	53,552	39,691	62,255
LTSPCs	—	522,262	421,404	522,262
Institutional Credit:				
AgVantage Securities	528,234	206,602	1,851,698	728,767
Revolving floating rate AgVantage facility	—	300,000	—	300,000
Total purchases, guarantees, LTSPCs, and AgVantage Securities	\$ 1,105,782	\$ 1,429,376	\$ 3,668,868	\$ 2,662,769

New business volume for loans within the Farm & Ranch line of business for the first nine months of 2016 was substantially greater than the first nine months of 2015. This is primarily due to an increase in borrower demand for long-term real estate financing, as farmers utilize equity in farmland assets to increase sources of operating capital, as well as increases in Farmer Mac's new customer base and the average size of loans purchased. New business volume for LTSPCs within the Farm & Ranch line of business for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015 reflected a modest increase in demand among Farm Credit System institutions for the LTSPC product. The increase in new business volume in the USDA Guarantees line of business for the first nine months of 2016 compared to the first nine months of 2015 reflected an increase in lender usage of USDA guaranteed loan programs due to available federal funding for such programs. Loan purchase volume in the Rural Utilities line of business remained low due to modest demand for credit associated with slow economic growth and greater energy efficiency in recent years, as well as an ongoing preference by CFC, Farmer Mac's only current rural utilities cooperative counterparty, to retain loans on its balance sheet. The large LTSPC transaction completed with CFC in second quarter 2016 marked the second time Farmer Mac has added loans under LTSPCs in the Rural Utilities line of business. Changes in AgVantage securities volume are primarily driven by the generally larger transaction sizes for that product and the fluctuating funding and liquidity needs of Farmer Mac's customer network and scheduled maturity amounts, which was reflected by the refinancing of a \$500.0 million AgVantage security during third quarter 2016.

Based on market conditions, 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 third quarter 2016 and third quarter 2015 was less than one year. Of those loans,

82 percent and 71 percent, respectively, had principal amortization periods longer than the maturity date, resulting in balloon payments at maturity, with a weighted-average remaining term to maturity of 18.2 years and 18.8 years, respectively.

During third quarter 2016 and 2015, Farmer Mac securitized some of the Farm & Ranch loans it had purchased and sold the resulting Farmer Mac Guaranteed Securities in the amounts of \$147.1 million and \$118.8 million, respectively. 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 three and nine months ended September 30, 2016, \$81.9 million and \$231.4 million, respectively, of Farmer Mac Guaranteed Securities were sold to Zions First National Bank, which is a related party to Farmer Mac, compared to \$83.1 million and \$166.7 million of sales for the three and nine months ended September 30, 2015, respectively.

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

Table 10

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	<i>(in thousands)</i>			
Loans securitized and sold as Farm & Ranch Guaranteed Securities	\$ 147,060	\$ 118,802	\$ 402,841	\$ 231,242
Farmer Mac Guaranteed USDA Securities	31,866	—	54,528	—
AgVantage Securities	528,234	206,602	1,851,698	728,767
Total Farmer Mac Guaranteed Securities issuances	<u>\$ 707,160</u>	<u>\$ 325,404</u>	<u>\$ 2,309,067</u>	<u>\$ 960,009</u>

The following table sets forth information regarding outstanding volume in each of Farmer Mac's four lines of business as of the dates indicated:

Table 11

Lines of Business - Outstanding Business Volume			
	As of September 30, 2016		As of December 31, 2015
	(in thousands)		
On-balance sheet:			
Farm & Ranch:			
Loans	\$	2,298,714	\$ 2,249,864
Loans held in trusts:			
Beneficial interests owned by third party investors		1,039,770	708,111
USDA Guarantees:			
USDA Securities		1,927,416	1,876,451
Farmer Mac Guaranteed USDA Securities		32,364	31,554
Rural Utilities:			
Loans		993,139	1,008,126
Institutional Credit:			
AgVantage Securities		6,069,640	5,439,383
Total on-balance sheet	\$	12,361,043	\$ 11,313,489
Off-balance sheet:			
Farm & Ranch:			
LTSPCs		2,224,827	2,253,273
Guaranteed Securities		441,417	514,051
USDA Guarantees:			
Farmer Mac Guaranteed USDA Securities		61,054	10,272
Rural Utilities:			
LTSPCs ⁽¹⁾		874,527	522,864
Institutional Credit:			
AgVantage Securities		984,871	984,871
AgVantage Revolving Line of Credit Facility ⁽²⁾		300,000	300,000
Total off-balance sheet	\$	4,886,696	\$ 4,585,331
Total	\$	17,247,739	\$ 15,898,820

⁽¹⁾ Includes \$8.8 million related to a one-year loan purchase commitment on which Farmer Mac receives a nominal unused commitment fee as of both September 30, 2016 and December 31, 2015.

⁽²⁾ As of both September 30, 2016 and December 31, 2015, this facility had not been utilized. Farmer Mac receives a fixed fee based on the full dollar amount of the facility. If the counterparty draws on the facility, the amounts drawn will be presented as AgVantage Securities, and Farmer Mac will earn interest income on those securities.

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 September 30, 2016:

Table 12

Schedule of Principal Amortization as of September 30, 2016

	Loans Held	Loans Underlying Off-Balance Sheet Farmer Mac Guaranteed Securities and LTSPCs	USDA Securities and Farmer Mac Guaranteed USDA Securities	Total
	<i>(in thousands)</i>			
2016	\$ 45,438	\$ 63,199	\$ 23,609	\$ 132,246
2017	178,536	298,917	95,524	572,977
2018	189,150	687,312	93,534	969,996
2019	184,032	220,307	95,940	500,279
2020	193,278	209,373	95,585	498,236
Thereafter	3,541,189	2,061,663	1,616,642	7,219,494
Total	<u>\$ 4,331,623</u>	<u>\$ 3,540,771</u>	<u>\$ 2,020,834</u>	<u>\$ 9,893,228</u>

Of the \$17.2 billion outstanding principal balance of volume included in Farmer Mac's four lines of business as of September 30, 2016, \$7.4 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 September 30, 2016:

Table 13

AgVantage Balances by Year of Maturity

	As of September 30, 2016
	<i>(in thousands)</i>
2016	\$ 310,082
2017	1,577,420
2018 ⁽¹⁾	1,572,235
2019	787,014
2020	731,388
Thereafter ⁽²⁾	2,376,372
Total	<u>\$ 7,354,511</u>

⁽¹⁾ Includes the expiration of the \$300.0 million revolving floating rate AgVantage facility. As of September 30, 2016, this facility had not been utilized.

⁽²⁾ Includes various maturities ranging from 2021 to 2044.

The weighted-average remaining maturity of the outstanding AgVantage securities shown in the table above was 4.0 years as of September 30, 2016. As a general matter, if maturing AgVantage securities are not replaced with new AgVantage securities, either from the same issuer or from new business, or if the

spread earned by Farmer Mac on new AgVantage securities that replace maturing AgVantage securities is lower than the spread earned on the maturing securities, Farmer Mac's income could be adversely affected.

As part of fulfilling its guarantee obligations for Farm & Ranch Guaranteed Securities and commitments to purchase eligible loans underlying LTSPCs, Farmer Mac purchases defaulted loans, all of which are at least 90-days delinquent or in material non-monetary default at the time of purchase, out of the loan pools underlying those securities and LTSPCs, and records the purchased loans as such on its balance sheet. The purchase price for a defaulted loan purchased out of a pool of loans backing Farm & Ranch Guaranteed Securities is the then-current outstanding principal balance of the loan plus accrued and unpaid interest. The purchase price for a defaulted loan purchased under an LTSPC is the then-current outstanding principal balance of the loan, with accrued and unpaid interest on the defaulted loan payable out of any future loan payments or liquidation proceeds as received. The purchase price of a defaulted loan is not an indicator of the expected loss on that loan; many other factors affect expected loss, if any, on any loan so purchased. The delinquent loans purchased out of securitized pools and LTSPCs during third quarter 2016 had a weighted average age of 9 years. The delinquent loans purchased out of securitized pools and LTSPCs during third quarter 2015 had a weighted-average age of 7 years. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk – Loans and Guarantees."

The following table presents Farmer Mac's purchases of defaulted loans underlying Farm & Ranch Guaranteed Securities and LTSPCs for the periods indicated:

Table 14

	For the Three Months Ended		For the Nine Months Ended	
	September 30, 2016	September 30, 2015	September 30, 2016	September 30, 2015
	<i>(in thousands)</i>			
Defaulted loans purchased underlying Farm & Ranch Guaranteed Securities owned by third party investors	\$ 250	\$ 263	\$ 398	\$ 2,244
Defaulted loans purchased underlying LTSPCs	852	—	2,118	—
Total loan purchases	<u>\$ 1,102</u>	<u>\$ 263</u>	<u>\$ 2,516</u>	<u>\$ 2,244</u>

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. While the pace of Farmer Mac's growth will depend on the capital and liquidity needs of the participants in the rural financing business, Farmer Mac foresees opportunities for continued growth. More specifically, Farmer Mac believes that its Farm & Ranch, USDA Guarantees, Rural Utilities, and Institutional Credit lines of business all have opportunities for growth, driven by several key factors:

- As agricultural and rural utilities lenders face increased equity capital requirements under new regulatory frameworks or rating agency requirements, or seek to reduce exposure due to lending limits or concentration limits, Farmer Mac can provide relief for those institutions through loan purchases, guarantees, or LTSPCs.
- While lending opportunities in the rural utilities industry remain stable, growth opportunities within Farmer Mac's Institutional Credit line of business exist because it provides a competitive source of debt funding for rural utilities cooperative lenders.

- As a result of targeted marketing and product development efforts, Farmer Mac's lender network and Institutional Credit customer base continues to expand, which may generate additional demand for Farmer Mac's products from new sources.

Farmer Mac believes that these growth opportunities will be important in replacing income earned on the loans and other assets as they mature, pay down, or are reinvested at potentially lower spreads.

Agricultural Industry. The agricultural industry includes many diverse sectors that respond in different ways to changes in economic conditions. Those individual sectors often are affected differently, sometimes positively and sometimes negatively, by prevailing domestic and global economic factors and regional weather conditions. This results in cycles where one or more sectors may be under stress at the same time that others are not. The profitability of agricultural sectors is also affected by commodity inventories and their associated market prices, which can vary largely as a result of global production trends, weather patterns, access to water supply, and harvest conditions that may affect both domestic and global supplies. The strength of the U.S. dollar relative to other worldwide currencies, combined with a slowdown in global economic growth, could also continue to adversely affect the demand for certain U.S. agricultural exports, which may result in producers receiving lower commodity prices.

Farmland values have declined recently in some regions, primarily in the Midwest, in response to declining commodity prices. However, Farmer Mac believes that its portfolio remains sufficiently diversified, both geographically and by commodity, and that its portfolio has generally demonstrated historically high credit quality and low delinquency rates to endure reasonably foreseeable volatility in farmland values and commodity prices. Farmer Mac also continues to closely monitor sector profitability, economic conditions, and agricultural land value and geographic trends to tailor underwriting practices to changing conditions. For more information about the loan balances and loan-to-value ratios for Farm & Ranch loans in Farmer Mac's portfolio as of September 30, 2016, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk – Loans and Guarantees."

The western part of the United States, and in particular California, continues to experience drought conditions to varying degrees. Although Farmer Mac has not observed any material effect on its portfolio from the drought through September 30, 2016, the persistence of drought conditions in certain areas of the west could have an adverse effect on Farmer Mac's delinquency rates or loss experience. Through regular discussions with its loan servicers and lenders and their customers, Farmer Mac continues to remain informed about the drought conditions and their effects in those areas.

Farmer Mac's marketing efforts directed towards the Farm & Ranch line of business focus on lenders that have demonstrated a commitment to agricultural lending based on their lending history. Farmer Mac directs its outreach efforts to these lenders through direct personal contact, which is facilitated through Farmer Mac's frequent participation in state and national banking conferences, its alliances with the American Bankers Association and the Independent Community Bankers of America, and its business relationships with members of the Farm Credit System. In the Farm & Ranch line of business, Farmer Mac has experienced continuing stable demand for its loan products. Demand for Farmer Mac's secondary market tools could also increase as rural lenders adapt to new and changing regulations, which may require lenders to obtain more liquidity and capital to continue their lending practices.

Farmer Mac also directs marketing efforts towards the agricultural industry by trying to identify and develop relationships with potential issuers of AgVantage securities, including insurance company

agricultural lenders, who can pledge loans as collateral to obtain financing as part of Farmer Mac's Institutional Credit line of business. As part of these efforts, Farmer Mac has recently increased its focus on wholesale financing for institutional investors in agricultural assets that qualify as eligible collateral under Farmer Mac's charter. In July 2014, Farmer Mac expanded its AgVantage product to this new type of issuer and refers to this product variation as the Farm Equity AgVantage product. Farmer Mac directs its outreach efforts to these potential issuers through its business relationships within the agricultural community and through executive outreach to institutions whose profile presents opportunity to benefit from wholesale financing. As institutional investment in agricultural assets continues to grow, Farmer Mac believes that it is in a unique position to help increase access to capital for these types of counterparties and thereby provide a new source of capital to benefit rural America. Farmer Mac designed the Farm Equity AgVantage product to provide an efficient, low-cost source of financing tailored to meet the needs of institutional investors that can be adapted to many different types of organizational structures and for both public and private institutional investors. Although this product is still in the early stages of development, Farmer Mac believes there is opportunity to expand this type of business as both the trend toward institutional investment in agricultural assets and awareness of the Farm Equity AgVantage product continue to grow. For more information about the Farm Equity AgVantage product, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk – Institutional" in this report and "Business—Farmer Mac Lines of Business—Institutional Credit" in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016.

Rural Utilities Industry. The rural utilities industry may experience increased needs for financing in the future to make improvements in response to environmental and clean energy policies. However, demand for capital within the rural utilities industry currently remains moderate, which has resulted in an ongoing high level of competition between rural utilities cooperative lenders that could suppress loan growth opportunities for those lenders, including lenders that participate in Farmer Mac's Rural Utilities line of business. Although competitive pressures remain within the rural utilities lending industry, Farmer Mac sees opportunities for growth in this area within Farmer Mac's Institutional Credit line of business because the wholesale funding rates that Farmer Mac provides may be highly competitive compared to other available sources of debt funding for rural utilities cooperative lenders.

Balance Sheet Review

Assets. Farmer Mac's total assets as of September 30, 2016 were \$16.0 billion, compared to \$15.5 billion as of December 31, 2015. The increase in total assets was primarily attributable to an increase in total Farmer Mac Guaranteed Securities and total loans, net of allowance, offset in part by a decrease in cash and cash equivalents.

As of September 30, 2016, Farmer Mac had \$0.3 billion of cash and cash equivalents and \$3.0 billion of investment securities, compared to \$1.2 billion of cash and cash equivalents and \$2.8 billion of investment securities as of December 31, 2015. As of September 30, 2016, Farmer Mac had \$6.1 billion of Farmer Mac Guaranteed Securities, \$4.3 billion of loans, net of allowance, and \$2.0 billion of USDA Securities. This compares to \$5.4 billion of Farmer Mac Guaranteed Securities, \$4.0 billion of loans, net of allowance, and \$1.9 billion of USDA Securities as of December 31, 2015.

Liabilities. Farmer Mac's total liabilities increased to \$15.4 billion as of September 30, 2016 from \$15.0 billion as of December 31, 2015. The increase in liabilities was primarily attributable to an increase in debt securities of consolidated trusts held by third parties.

Equity. As of September 30, 2016, Farmer Mac had total equity of \$600.9 million, comprised of stockholders' equity of \$600.7 million and non-controlling interest of \$0.2 million related to Farmer Mac's appraisal subsidiary, AgVisory. As of December 31, 2015, Farmer Mac had total equity of \$553.7 million, comprised of stockholders' equity of \$553.5 million and non-controlling interest of \$0.2 million. The increase in total equity was a result of an increase in retained earnings and accumulated other comprehensive income. The increase in accumulated other comprehensive income was due to increases in fair value on certain fixed-rate USDA Securities offset in part by decreases in fair value on cash flow hedges as long-term market interest rates declined during the first nine months of 2016.

Off-Balance Sheet Arrangements

Farmer Mac offers approved lenders two credit enhancement alternatives to increase their liquidity or lending capacity while retaining the cash flow benefits of their loans: (1) Farmer Mac Guaranteed Securities, which are available through each of the Farm & Ranch, USDA Guarantees, Rural Utilities, and Institutional Credit lines of business; and (2) LTSPCs, which are available through the Farm & Ranch and Rural Utilities lines of business. For securitization trusts where Farmer Mac is the primary beneficiary, the trust assets and liabilities are included on Farmer Mac's consolidated balance sheet. For the remainder of these transactions, and in the event of deconsolidation, both of these alternatives result in the creation of off-balance sheet obligations for Farmer Mac. See Note 6 to the consolidated financial statements for more information about consolidation and Farmer Mac's off-balance sheet business activities.

Risk Management

Credit Risk – Loans and Guarantees. Farmer Mac is exposed to credit risk resulting from the inability of borrowers to repay their loans in conjunction with a deficiency in the value of the collateral relative to the outstanding balance of the loan and the costs of liquidation. Farmer Mac is exposed to credit risk on:

- loans held;
- loans underlying Farmer Mac Guaranteed Securities; and
- loans underlying LTSPCs.

Farmer Mac generally assumes 100 percent of the credit risk on loans held, loans underlying LTSPCs in the Farm & Ranch and Rural Utilities lines of business, and Farmer Mac Guaranteed Securities in the Farm & Ranch line of business. Farmer Mac has direct credit exposure to loans in non-AgVantage transactions and indirect credit exposure to loans that secure AgVantage transactions because AgVantage securities represent a general obligation of an issuer that is, in turn, secured by eligible loans. The credit exposure of Farmer Mac and Farmer Mac II LLC on USDA Securities, including those underlying Farmer Mac Guaranteed USDA Securities, is covered by the full faith and credit of the United States. Therefore, Farmer Mac believes that Farmer Mac and Farmer Mac II LLC have little or no credit risk exposure in the USDA Guarantees line of business because of the USDA guarantee. As of September 30, 2016, neither Farmer Mac nor Farmer Mac II LLC had experienced any credit losses on any business under the USDA Guarantees line of business, and neither expects to incur any such losses in the future.

Farmer Mac has established underwriting, collateral valuation, and documentation standards for agricultural real estate mortgage loans and rural utilities loans. Farmer Mac believes that these standards mitigate the risk of loss from borrower defaults and provide guidance about the management, administration, and conduct of underwriting and appraisals to all participating and potential lenders. These standards were developed based on industry practices for agricultural real estate mortgage loans and rural utilities loans and are designed to assess the creditworthiness of the borrower, as well as the value of the collateral securing the loan. Farmer Mac evaluates and adjusts these standards on an ongoing basis based on current and anticipated market conditions. For more information about Farmer Mac's underwriting and collateral valuation standards, see "Business—Farmer Mac Lines of Business—Farm & Ranch—Underwriting and Collateral Valuation (Appraisal) Standards" and "Business—Farmer Mac Lines of Business—Rural Utilities—Underwriting" in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016.

Farmer Mac requires approved lenders to make representations and warranties regarding 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 are responsible to Farmer Mac for breaches of those representations and warranties, and 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 third quarter 2016, Farmer Mac did not require any seller to cure or repurchase a loan purchased by Farmer Mac for breach of a representation or warranty. During the previous three years as of September 30, 2016, Farmer Mac had required one seller to repurchase a total of two loans aggregating \$0.8 million for breaches of representations and warranties made about those two loans, both

of which repurchases occurred during first quarter 2016. In addition to relying on the representations and warranties of lenders, Farmer Mac also underwrites all of the agricultural mortgage loans (other than rural housing and part-time farm mortgage loans) and rural utilities loans that it holds in its portfolio. For rural housing and part-time farm mortgage loans, Farmer Mac relies on representations and warranties from the seller that those loans conform to Farmer Mac's specified underwriting criteria without exception. For more information about Farmer Mac's loan eligibility requirements, see "Business—Farmer Mac Lines of Business—Farm & Ranch—Loan Eligibility" and "Business—Farmer Mac Lines of Business—Rural Utilities—Loan Eligibility" in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016.

Under contracts with Farmer Mac and in consideration for servicing fees, Farmer Mac-approved central servicers service loans in accordance with Farmer Mac's requirements. Central servicers are responsible to Farmer Mac for serious errors in the servicing of those loans. If a central 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, Farmer Mac has the right to terminate the servicing relationship for a particular loan or the entire portfolio serviced by the central servicer. In addition, Farmer Mac can proceed against the central servicer in arbitration or exercise any remedies available to it under law. In the last three years, Farmer Mac has not exercised any remedies or taken any formal action against any central servicers. For more information about Farmer Mac's servicing requirements, see "Business—Farmer Mac Lines of Business—Farm & Ranch—Servicing" and "Business—Farmer Mac Lines of Business—Rural Utilities—Servicing" in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016.

Farmer Mac's AgVantage securities are general obligations of institutions approved by Farmer Mac and are secured by eligible loans in an amount at least equal to the outstanding principal amount of the security. Farmer Mac excludes the loans that secure AgVantage securities from the credit risk metrics it discloses because Farmer Mac has only indirect credit risk on those loans and because of the other characteristics of AgVantage securities that mitigate credit risk. Those characteristics include a general obligation of an issuing institution approved by Farmer Mac, the required collateralization level for the securities, the requirement for delinquent loans to be removed from the pool of pledged loans and replaced with current eligible loans, and in some cases, the requirement for the counterparty to comply with specified financial covenants for the life of the related AgVantage security. As such, all AgVantage securities are secured by current loans representing at least 100 percent of the outstanding amount of these securities. As of September 30, 2016, Farmer Mac had not experienced any credit losses on any AgVantage securities and does not expect to incur any such losses in the future. 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 has developed different underwriting standards for rural utilities loans that depend on whether direct or indirect credit exposure is assumed on a loan and whether the borrower is an electric distribution cooperative or a G&T cooperative. As of September 30, 2016, there were no delinquencies in Farmer Mac's portfolio of rural utilities loans, and Farmer Mac has not experienced any credit losses on rural utilities loans since Congress authorized Farmer Mac's Rural Utilities line of business in 2008. Based on this performance, Farmer Mac excludes the loans in the Rural Utilities line of business from the credit risk metrics it discloses. Farmer Mac's direct credit exposure to rural utilities loans and loans underlying LTSPCs as of September 30, 2016 was \$1.9 billion across 38 states, of which \$1.5 billion were loans to electric distribution cooperatives and \$0.4 billion were loans to G&T cooperatives. Farmer Mac also had indirect credit exposure to the rural utilities loans securing AgVantage securities and

included in the Institutional Credit line of business, some of which are loans to G&T cooperatives. For more information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Management—Credit Risk – Institutional."

Farmer Mac maintains an allowance for loan losses to cover estimated probable losses on loans held and a reserve for losses to cover estimated probable losses on loans underlying LTSPCs and off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities). The methodology that Farmer Mac uses to determine the level of its allowance for losses is described in Note 2(j) to the consolidated financial statements included in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016. Management believes that this methodology produces a reasonable estimate of probable losses, as of the balance sheet date, for all loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities) and LTSPCs.

The following table summarizes the components of Farmer Mac's total allowance for losses for the three and nine months ended September 30, 2016 and 2015:

Table 15

	September 30, 2016			September 30, 2015		
	Allowance for Loan Losses	Reserve for Losses	Total Allowance for Losses	Allowance for Loan Losses	Reserve for Losses	Total Allowance for Losses
	(in thousands)					
For the Three Months Ended:						
Beginning Balance	\$ 4,893	\$ 2,191	\$ 7,084	\$ 5,939	\$ 4,637	\$ 10,576
Provision for/(release of) losses	191	(222)	(31)	(1,164)	861	(303)
Charge-offs	(130)	—	(130)	—	—	—
Ending Balance	<u>\$ 4,954</u>	<u>\$ 1,969</u>	<u>\$ 6,923</u>	<u>\$ 4,775</u>	<u>\$ 5,498</u>	<u>\$ 10,273</u>
For the Nine Months Ended:						
Beginning Balance	\$ 4,480	\$ 2,083	\$ 6,563	\$ 5,864	\$ 4,263	\$ 10,127
Provision for/(release of) losses	604	(114)	490	(978)	1,235	257
Charge-offs	(130)	—	(130)	(111)	—	(111)
Ending Balance	<u>\$ 4,954</u>	<u>\$ 1,969</u>	<u>\$ 6,923</u>	<u>\$ 4,775</u>	<u>\$ 5,498</u>	<u>\$ 10,273</u>

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." As of September 30, 2016, Farmer Mac's allowances for losses totaled \$6.9 million, or 12 basis points of the outstanding principal balance of loans held for investment and loans underlying LTSPCs and off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities), compared to \$6.6 million, or 11 basis points, as of December 31, 2015.

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 September 30, 2016, Farmer Mac's 90-day delinquencies were \$18.4 million (0.31 percent of the Farm & Ranch portfolio), compared to \$32.1 million (0.56 percent of the Farm & Ranch portfolio) as of December 31, 2015 and \$36.7 million (0.67 percent of the Farm & Ranch portfolio) as of September 30, 2015. Those 90-day delinquencies were comprised of 50 delinquent loans as of September 30, 2016, compared with 35

delinquent loans as of December 31, 2015 and 37 delinquent loans as of September 30, 2015. The decrease in Farmer Mac's 90-day delinquencies as a percentage of its Farm & Ranch portfolio from year-end primarily related to (1) the workout in January 2016 of two Agricultural Storage and Processing loans that financed one canola facility and (2) Farmer Mac's receipt of \$6.0 million to pay off two long-standing delinquent timber loans with the same borrower. Farmer Mac's 90-day delinquencies have historically fluctuated from quarter to quarter, both in dollars and as a percentage of the outstanding Farm & Ranch portfolio, with higher levels generally observed at the end of the first and third quarters of each year, which corresponds with the annual (January 1st) and semi-annual (January 1st and July 1st) payment characteristics of most Farm & Ranch loans. Farmer Mac expects that over time its 90-day delinquency rate will eventually revert closer to Farmer Mac's historical averages due to macroeconomic and other potential factors, but Farmer Mac has not yet seen an impact on its portfolio or a rise in delinquencies related to these factors. Farmer Mac's average 90-day delinquency rate for the Farm & Ranch line of business over the last fifteen years is approximately 1 percent.

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

Table 16

	Farm & Ranch Line of Business	90-Day Delinquencies	Percentage
	<i>(dollars in thousands)</i>		
As of:			
September 30, 2016	\$ 6,004,728	\$ 18,377	0.31%
June 30, 2016	5,830,533	22,093	0.38%
March 31, 2016	5,713,789	34,680	0.61%
December 31, 2015	5,725,299	32,136	0.56%
September 30, 2015	5,504,030	36,669	0.67%
June 30, 2015	5,485,570	31,852	0.58%
March 31, 2015	5,347,248	32,101	0.60%
December 31, 2014	5,417,174	18,917	0.35%
September 30, 2014	5,314,437	24,661	0.46%

When analyzing the overall risk profile of its lines of business, Farmer Mac takes into account more than the Farm & Ranch loan delinquency percentages provided above. The lines of business also include AgVantage securities and Rural Utilities loans held and underlying LTSPCs, neither of which have any delinquencies, and USDA Securities, which are backed by the full faith and credit of the United States. Across all of Farmer Mac's lines of business, 90-day delinquencies represented 0.11 percent of total outstanding business volume as of September 30, 2016, compared to 0.20 percent as of December 31, 2015.

As of September 30, 2016, Farmer Mac individually evaluated \$22.4 million of the \$77.9 million of recorded investment in impaired loans for collateral shortfalls against updated appraised values, other updated collateral valuations, or discounted values. For the remaining \$55.5 million of impaired assets for which updated valuations were not available, Farmer Mac evaluated them in the aggregate in consideration of their similar risk characteristics and historical statistics. Farmer Mac recorded specific allowances of \$2.0 million for undercollateralized assets as of September 30, 2016. Farmer Mac's general allowances were \$4.9 million as of September 30, 2016.

Loans in the Farm & Ranch line of business are all secured by first liens on agricultural real estate. Accordingly, Farmer Mac's exposure on a loan is limited to the difference between (1) the total of the accrued interest, advances, and the principal balance of a loan and (2) the value of the property less the cost to sell. Measurement of that excess or shortfall is the best predictor and determinant of loss, compared to other measures that evaluate the efficiency of a particular farm operator. Debt service ratios depend upon farm operator efficiency and leverage, which can vary widely within a geographic region, commodity type, or an operator's business and farming skills. A loan's original loan-to-value ratio is one of many factors Farmer Mac considers in evaluating loss severity and is calculated by dividing the loan principal balance at the time of guarantee, purchase, or commitment by the appraised value at the date of loan origination or, when available, updated appraised value at the time of guarantee, purchase, or commitment. Other factors include, but are not limited to, other underwriting standards, commodity and farming forecasts, and regional economic and agricultural conditions.

Loan-to-value ratios depend upon the market value of a property, as determined in accordance with Farmer Mac's collateral valuation standards. As of September 30, 2016 and December 31, 2015, the average unpaid loan balance for loans outstanding in the Farm & Ranch line of business was \$605,000 and \$602,000, respectively. The original loan-to-value ratio is based on the original appraised value that has not been indexed to provide a current market value or reflect amortization of loans. The weighted average original loan-to-value ratio for Farm & Ranch loans purchased during third quarter 2016 was 46 percent, compared to 48 percent for loans purchased in the same period for 2015. 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 (excluding AgVantage securities) and LTSPCs was approximately 46 percent as of both September 30, 2016 and December 31, 2015. The weighted-average original loan-to-value ratio for all 90-day delinquencies was 44 percent and 45 percent, respectively, as of September 30, 2016 and December 31, 2015.

The weighted average current loan-to-value ratio, which is the loan-to-value ratio based on original appraised value but which reflects loan amortization since purchase, for Farm & Ranch loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities) and LTSPCs was approximately 44 percent as of both September 30, 2016 and December 31, 2015.

The following table presents outstanding Farm & Ranch loans held and loans underlying LTSPCs and off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities) and 90-day delinquencies as of September 30, 2016 by year of origination, geographic region, commodity/collateral type, and original loan-to-value ratio:

Table 17

Farm & Ranch 90-Day Delinquencies as of September 30, 2016

	Distribution of Farm & Ranch Line of Business	Farm & Ranch Line of Business	90-Day Delinquencies ⁽¹⁾	Percentage
	(dollars in thousands)			
By year of origination:				
2004 and prior	9%	538,837	7,232	1.34%
2005	3%	163,073	1,297	0.80%
2006	2%	145,887	598	0.41%
2007	3%	153,231	813	0.53%
2008	3%	200,510	1,447	0.72%
2009	2%	136,294	2,149	1.58%
2010	4%	215,115	—	—%
2011	5%	302,237	1,006	0.33%
2012	12%	695,342	—	—%
2013	17%	1,009,561	837	0.08%
2014	12%	728,191	2,998	0.41%
2015	15%	916,649	—	—%
2016	13%	799,801	—	—%
Total	100%	\$ 6,004,728	\$ 18,377	0.31%
By geographic region ⁽²⁾ :				
Northwest	10%	\$ 616,869	\$ 3,785	0.61%
Southwest	30%	1,796,800	5,602	0.31%
Mid-North	34%	2,051,860	923	0.04%
Mid-South	14%	824,236	3,819	0.46%
Northeast	4%	225,068	2,191	0.97%
Southeast	8%	489,895	2,057	0.42%
Total	100%	\$ 6,004,728	\$ 18,377	0.31%
By commodity/collateral type:				
Crops	56%	\$ 3,372,582	\$ 8,598	0.25%
Permanent plantings	17%	1,018,098	5,438	0.53%
Livestock	21%	1,263,133	1,688	0.13%
Part-time farm	5%	292,680	2,653	0.91%
Ag. Storage and Processing	1%	44,632	—	—%
Other	—	13,603	—	—%
Total	100%	\$ 6,004,728	\$ 18,377	0.31%
By original loan-to-value ratio:				
0.00% to 40.00%	28%	\$ 1,687,390	\$ 6,149	0.36%
40.01% to 50.00%	23%	1,379,453	1,841	0.13%
50.01% to 60.00%	28%	1,662,645	7,544	0.45%
60.01% to 70.00%	18%	1,087,226	2,674	0.25%
70.01% to 80.00% ⁽³⁾	3%	164,868	169	0.10%
80.01% to 90.00% ⁽³⁾	—%	23,146	—	—%
Total	100%	\$ 6,004,728	\$ 18,377	0.31%

⁽¹⁾ Includes loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities) and LTSPCs that are 90 days or more past due, in foreclosure, and in bankruptcy, 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.

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 (excluding AgVantage securities) as of September 30, 2016 by year of origination, geographic region, and commodity/collateral type. The purpose of this information is to present information regarding losses relative to original Farm & Ranch purchases, guarantees, and commitments.

Table 18

Farm & Ranch Credit Losses Relative to Cumulative
Original Loans, Guarantees, and LTSPCs as of September 30, 2016

	Cumulative Original Loans, Guarantees and LTSPCs	Cumulative Net Credit Losses	Cumulative Loss Rate
	(dollars in thousands)		
By year of origination:			
2004 and prior	10,826,096	11,915	0.11 %
2005	898,369	(184)	(0.02)%
2006	892,490	9,617	1.08 %
2007	716,906	4,671	0.65 %
2008	811,330	3,377	0.42 %
2009	543,017	1,508	0.28 %
2010	647,914	—	— %
2011	760,161	3,661	0.48 %
2012	1,130,654	—	— %
2013	1,383,433	—	— %
2014	925,979	—	— %
2015	1,013,898	—	— %
2016	865,057	—	— %
Total	\$ 21,415,304	\$ 34,565	0.16 %
By geographic region ⁽¹⁾ :			
Northwest	\$ 2,860,144	\$ 11,193	0.39 %
Southwest	7,386,366	9,108	0.12 %
Mid-North	5,446,964	12,830	0.24 %
Mid-South	2,559,643	(211)	(0.01)%
Northeast	1,298,382	169	0.01 %
Southeast	1,863,805	1,476	0.08 %
Total	\$ 21,415,304	\$ 34,565	0.16 %
By commodity/collateral type:			
Crops	\$ 9,918,569	\$ 4,382	0.04 %
Permanent plantings	4,305,863	9,332	0.22 %
Livestock	5,232,017	3,859	0.07 %
Part-time farm	1,158,516	1,319	0.11 %
Ag. Storage and Processing	645,681	15,673	2.43 %
Other	154,658	—	— %
Total	\$ 21,415,304	\$ 34,565	0.16 %

⁽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. Within most commodity groups, certain geographic areas allow greater economies of scale or proximity to markets than others and, consequently, may result in more successful operations within the commodity group. Certain geographic areas also offer better growing conditions and market access than others and, consequently, may result in more versatile and more successful operators within a given commodity group. Farmer Mac's board of directors has established

policies regarding geographic and commodity concentration to maintain adequate diversification and measure concentration risk.

However, in Farmer Mac's experience, the degree to which the collateral for a commodity group is single-use or highly improved is a more significant determinant of the probability of ultimate losses on a given loan than diversity of geographic location within a commodity group. Commodity groups that tend to be single-use or highly improved include permanent plantings (for example, nut crops), agricultural storage and processing facilities (for example, canola plants and grain processing facilities), and certain livestock facilities (for example, dairy facilities). The versatility of a borrower's operation (and in the case of persisting adverse economic conditions, the borrower's ability to switch commodity groups) will more likely result in profitability for the borrower and, consequently, a lower risk of decreased value for the underlying collateral. Producers of agricultural commodities that require highly improved property are generally less able to adapt their operations when faced with adverse economic conditions. In addition, in the event of a borrower's default, the prospective sale value of the collateral is more likely to decrease and the related loan may become undercollateralized. This analysis is consistent with corresponding commodity analyses, which indicate that Farmer Mac has experienced higher loss and collateral deficiency rates in permanent planting loans and agricultural storage and processing loans, for which the collateral is typically highly improved and specialized.

The following tables present concentrations of Farm & Ranch loans held and loans underlying LTSPCs and off-balance sheet Farm & Ranch Guaranteed Securities (excluding AgVantage securities) by commodity type within geographic region and cumulative credit losses by origination year and commodity type:

Table 19

As of September 30, 2016							
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	\$ 314,061	\$ 80,172	\$ 182,918	\$ 39,524	\$ —	\$ 194	\$ 616,869
	5.2%	1.3%	3.0%	0.7%	—%	—%	10.2%
Southwest	521,710	758,697	439,124	54,897	13,517	8,855	1,796,800
	8.8%	12.6%	7.3%	0.9%	0.2%	0.1%	29.9%
Mid-North	1,767,330	19,434	183,283	66,333	11,597	3,883	2,051,860
	29.4%	0.3%	3.1%	1.1%	0.2%	0.1%	34.2%
Mid-South	514,537	23,301	242,634	38,990	4,575	199	824,236
	8.6%	0.4%	4.0%	0.5%	0.1%	—%	13.6%
Northeast	99,202	17,110	47,104	55,835	5,725	92	225,068
	1.7%	0.3%	0.8%	0.9%	0.1%	—%	3.8%
Southeast	155,742	119,384	168,070	37,101	9,218	380	489,895
	2.6%	2.1%	2.8%	0.6%	0.2%	—%	8.3%
Total	\$ 3,372,582	\$ 1,018,098	\$1,263,133	\$ 292,680	\$ 44,632	\$ 13,603	\$6,004,728
	56.3%	17.0%	21.0%	4.7%	0.8%	0.2%	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 20

As of September 30, 2016						
Farm & Ranch Cumulative Credit Losses/(Recoveries) by Origination Year and Commodity Type						
Crops	Permanent Plantings	Livestock	Part-time Farm	Ag. Storage and Processing	Total	
(in thousands)						
By year of origination:						
1995 and Prior	\$ 277	\$ (79)	\$ (107)	\$ —	\$ —	\$ 91
1996	(721)	2,296	(73)	—	—	1,502
1997	(397)	2,785	(131)	—	—	2,257
1998	(438)	1,803	1,781	—	—	3,146
1999	(108)	723	158	296	—	1,069
2000	7	1,907	1,049	(41)	—	2,922
2001	45	1	132	—	—	178
2002	—	—	—	89	—	89
2003	309	—	—	41	—	350
2004	—	—	162	149	—	311
2005	(87)	(263)	—	166	—	(184)
2006	1,688	—	40	201	7,688	9,617
2007	1,083	11	779	288	2,510	4,671
2008	2,626	—	—	130	621	3,377
2009	98	148	69	—	1,193	1,508
2010	—	—	—	—	—	—
2011	—	—	—	—	3,661	3,661
2012	—	—	—	—	—	—
2013	—	—	—	—	—	—
2014	—	—	—	—	—	—
2015	—	—	—	—	—	—
2016	—	—	—	—	—	—
Total	\$ 4,382	\$ 9,332	\$ 3,859	\$ 1,319	\$ 15,673	\$ 34,565

Farmer Mac regularly conducts detailed, statistical stress tests of its portfolio for credit risk and compares those results to current and historical credit quality metrics and to the various statutory, regulatory, and Farmer Mac's board of directors' capital policy metrics. Farmer Mac's methodologies for pricing its guarantee and commitment fees, managing credit risk, and providing adequate allowances for losses consider all of the foregoing factors and information.

Credit Risk – Institutional. Farmer Mac is exposed to credit risk arising from its business relationships with other institutions including:

- 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 and transaction. The required collateralization level is established at the time the AgVantage facility is entered into with the counterparty and does not change during the life of the AgVantage securities issued under such facility. In AgVantage transactions, the corporate obligor is

required to remove from the pool of pledged collateral any loan that becomes more than 30 days delinquent in the payment of principal or interest and to substitute an eligible loan that is current in payment to maintain the minimum required collateralization level. In the event of a default on the general obligation, 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, Farmer Mac also requires that the counterparty generally (1) maintain a higher collateralization level, through lower loan-to-value ratio thresholds and higher overcollateralization than required for traditional AgVantage securities and (2) comply with specified financial covenants for the life of the related Farm Equity AgVantage security to avoid default. For a more detailed description of AgVantage securities, see "Business—Farmer Mac Lines of Business—Institutional Credit—AgVantage Securities" in Farmer Mac's Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 10, 2016.

The unpaid principal balance of outstanding on-balance sheet AgVantage securities secured by loans eligible for the Farm & Ranch line of business totaled \$3.8 billion as of September 30, 2016 and \$3.4 billion as of December 31, 2015. The unpaid principal balance of on-balance sheet AgVantage securities secured by loans eligible for the Rural Utilities line of business totaled \$2.3 billion as of September 30, 2016 and \$2.1 billion as of December 31, 2015. In addition, the unpaid principal balance of outstanding off-balance sheet AgVantage transactions totaled \$1.3 billion as of both September 30, 2016 and December 31, 2015.

The following table provides information about the issuers of AgVantage securities, as well as the required collateralization levels for those transactions as of September 30, 2016 and December 31, 2015:

Table 21

Counterparty	As of September 30, 2016			As of December 31, 2015		
	Balance	Credit Rating	Required Collateralization	Balance	Credit Rating	Required Collateralization
<i>(dollars in thousands)</i>						
AgVantage:						
MetLife	\$ 2,700,000	AA-	103%	\$ 2,550,000	AA-	103%
CFC ⁽¹⁾	2,605,712	A	100%	2,384,257	A	100%
Rabo Agrifinance, Inc.	1,700,000	None	106%	1,500,000	None	106%
Other ⁽²⁾	91,459	⁽³⁾	102% to 125%	95,716	⁽³⁾	102% to 125%
Farm Equity AgVantage ⁽⁴⁾	257,340	None	110%	194,281	None	110%
Total outstanding	\$ 7,354,511			\$ 6,724,254		

⁽¹⁾ Includes \$300.0 million related to a revolving floating rate AgVantage facility. Farmer Mac receives a fixed fee based on the full dollar amount of the facility. This facility had not been drawn upon as of either September 30, 2016 and December 31, 2015.

⁽²⁾ Consists of AgVantage securities issued by 5 different issuers as of September 30, 2016 and 6 different issuers as of December 31, 2015.

⁽³⁾ Includes \$91.5 million related to 5 issuers without a credit rating as of September 30, 2016 and \$70.4 million related to 5 issuers without a credit rating and \$25.3 million related to an issuer with a credit rating of BBB- as of December 31, 2015.

⁽⁴⁾ Consists of securities from 3 separate issuers as of September 30, 2016 and 2 separate issuers as of December 31, 2015.

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 bank credit rating agency reports. For more information about Farmer Mac's lender eligibility requirements, see "Business—Farmer Mac Lines of Business—Farm & Ranch—Approved Lenders" and "Business—Farmer Mac Lines of Business—Rural Utilities—Approved Lenders" in Farmer Mac's Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 10, 2016.

Farmer Mac manages institutional credit risk related to its interest rate swap counterparties through collateralization provisions contained in each of its swap agreements that varies based on the market value of its swaps portfolio with each counterparty. Furthermore, new rules jointly issued by various prudential regulators, including the FCA, establish minimum requirements for the exchange of initial and variation margin between Farmer Mac and its swap dealer counterparties in non-cleared swaps transactions. Farmer Mac will be required to comply with some of these requirements by March 1, 2017. In addition, Farmer Mac transacts interest rate swaps with multiple counterparties to ensure a more even distribution of institutional credit risk related to its swap transactions. As a result of mandatory clearing rules for certain interest rate derivative transactions enacted under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), Farmer Mac uses the clearing process for cleared swap transactions as another mechanism for managing its derivative counterparty risk. 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 6 to the consolidated financial statements.

Credit Risk – Other Investments. As of September 30, 2016, Farmer Mac had \$0.3 billion of cash and cash equivalents and \$3.0 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, which establish limitations on dollar amount, issuer concentration, and credit quality. Those regulations can be found at 12 C.F.R. §§ 652.1-652.45 (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 policies generally require each investment or issuer of an investment to be highly rated by a nationally recognized statistical rating organization ("NRSRO"). Investments in mortgage securities and asset-backed securities are required to have a rating in the highest NRSRO category. Corporate debt securities with maturities of no more than five years but more than three years are required to be rated in one of the two highest categories; corporate debt securities with maturities of three years or less are required to be rated in one of the three highest categories. Some investments do not require a rating, such as U.S. Treasury securities and other obligations fully insured by the United States government or a government agency or diversified investment funds regulated under the Investment Company Act of 1940. Investments in diversified investment funds are further limited to those funds that are holding only instruments approved for direct investment by Farmer Mac.

The Liquidity and Investment Regulations and Farmer Mac's policies also establish concentration limits, which are intended to limit exposure to any one counterparty. The Liquidity and Investment Regulations limit Farmer Mac's total credit exposure to any single issuer of securities and uncollateralized financial derivatives to 25 percent of Farmer Mac's regulatory capital (as of September 30, 2016, 25 percent of Farmer Mac's regulatory capital was \$148.5 million), though Farmer Mac's current policy, for any investments made after the effective date of this policy, limits this total credit exposure to 5 percent of its regulatory capital (as of September 30, 2016, 5 percent of Farmer Mac's regulatory capital was \$29.7 million). These exposure limits do not apply to obligations of the United States or GSEs, though Farmer Mac is restricted by the Liquidity and Investment Regulations and its own policy from investing more than 100 percent of its regulatory capital in any one GSE.

On February 23, 2016, FCA published a proposed rule in the Federal Register to amend the Liquidity and Investment Regulations to comply with Section 939A of the Dodd-Frank Act by removing references and requirements relating to credit ratings and replacing them with other standards of creditworthiness, as well as to revise the eligibility criteria and exposure limits for certain types of investments. Farmer Mac submitted comments on this proposed rule to FCA on April 25, 2016. Farmer Mac expects that it will be able to successfully adapt to FCA's proposed amendments of the Liquidity and Investment Regulations.

Interest Rate Risk. Farmer Mac is subject to interest rate risk on all assets retained on its balance sheet because of possible timing differences in the cash flows of the assets and related liabilities. This risk is primarily related to loans held, Farmer Mac Guaranteed Securities, and USDA Securities due to the ability of borrowers to prepay their loans before the scheduled maturities, thereby increasing the risk of asset and liability cash flow mismatches. Cash flow mismatches in a changing interest rate environment can reduce the earnings of Farmer Mac if assets repay 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, or if assets repay more slowly than expected and the associated debt must be replaced by higher-cost debt. As discussed below, Farmer Mac manages this interest rate risk by funding assets purchased with liabilities matching the duration and cash flow characteristics of the assets purchased.

The goal of interest rate risk management at Farmer Mac is to create and maintain a portfolio that generates stable earnings and value across a variety of interest rate environments. Farmer Mac's primary strategy for managing interest rate risk is to fund asset purchases with liabilities that have similar duration and cash flow characteristics so that they will perform similarly as interest rates change. To match these characteristics, Farmer Mac issues discount notes and both callable and non-callable medium-term notes across a spectrum of maturities. Farmer Mac issues callable debt to offset the prepayment risk associated with some loans. By using a blend of liabilities that includes callable debt, the interest rate sensitivities of the liabilities tend to increase or decrease as interest rates change in a manner similar to changes in the interest rate sensitivities of the assets. Farmer Mac also uses financial derivatives to better match the durations of Farmer Mac's assets and liabilities, thereby reducing overall interest rate sensitivity.

Taking into consideration the prepayment provisions and the default probabilities associated with its loan assets, Farmer Mac uses prepayment models to project and value 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 subsequent prepayment forecasts.

In certain cases, yield maintenance provisions and other prepayment penalties contained in agricultural mortgage loans and rural utilities loans reduce, but do not eliminate, prepayment risk. Those provisions require borrowers to make an additional payment when they prepay their loans, thus compensating Farmer Mac for the shortened duration of the prepaid loan. As of September 30, 2016, less than 1 percent of the total outstanding balance of loans in the Farm & Ranch line of business where Farmer Mac either owned the loan or the beneficial interest in the underlying loan had yield maintenance provisions or other forms of prepayment protection (together covering 2 percent of all loans with fixed interest rates). Of the Farm & Ranch loans purchased in third quarter 2016, none had yield maintenance or another form of prepayment protection. As of September 30, 2016, none of Farmer Mac's USDA Securities had yield maintenance provisions; however, 4 percent contained other prepayment penalties. Of the USDA Securities purchased in third quarter 2016, 5 percent contained various forms of prepayment penalties. As of September 30, 2016, 61 percent of the Rural Utilities loans owned by Farmer Mac had yield

maintenance provisions. Of the Rural Utilities loans purchased in third quarter 2016, 100 percent contained prepayment penalties.

Farmer Mac's purchases of eligible loan assets expose Farmer Mac to interest rate risk arising primarily from uncertainty as to when the borrowers will repay the outstanding principal balance on the related loans. Generally, the values of Farmer Mac's eligible loan assets, and the debt issued to fund these assets, increase when interest rates decline, and their values decrease as interest rates rise. Furthermore, changes in interest rates may affect loan prepayment rates which may, in turn, affect durations and values of the loans. Declining interest rates generally increase prepayment rates, which shortens the duration of these assets, while rising interest rates tend to slow loan prepayments, thereby extending the duration of the loans.

Farmer Mac is also subject to interest rate risk on loans that Farmer Mac has committed to acquire (other than delinquent loans through LTSPCs) but has not yet purchased. When Farmer Mac commits to purchase those loans, it is exposed to interest rate risk between the time it commits to purchase the loans and the time it either:

- sells Farmer Mac Guaranteed Securities backed by the loans; or
- issues debt to retain the loans in its portfolio.

Farmer Mac manages the interest rate risk related to these loans, and any related Farmer Mac Guaranteed Securities or debt issuance, through the use of forward sale contracts on the debt securities of other GSEs and futures contracts involving U.S. Treasury securities. Farmer Mac uses forward sale contracts on GSE securities to reduce its interest rate exposure to changes in both U.S. Treasury rates and spreads on Farmer Mac debt and certain Farmer Mac Guaranteed Securities. Issuing debt to fund the loans as investments does not fully eliminate interest rate risk due to the possible timing differences in the cash flows of the assets and related liabilities, as discussed above.

Farmer Mac's \$0.3 billion of cash and cash equivalents mature within three months and are funded with discount notes having similar maturities. As of September 30, 2016, \$2.7 billion of the \$3.0 billion of investment securities (90 percent) were floating rate securities with rates that adjust within one year or fixed rate securities with original maturities between three months and one year. Those securities are funded with effectively floating rate debt that closely matches the rate adjustment dates of the associated investments. As of September 30, 2016, Farmer Mac had outstanding discount notes of \$5.0 billion, medium-term notes that mature within one year of \$4.3 billion, and medium-term notes that mature after one year of \$4.8 billion.

Recognizing that interest rate sensitivity may change with the passage of time and as interest rates change, Farmer Mac assesses this exposure on a regular basis and, if necessary, readjusts its portfolio of assets and liabilities by:

- purchasing assets in the ordinary course of business;
- refinancing existing liabilities; or
- using financial derivatives to alter the characteristics of existing assets or liabilities.

Farmer Mac regularly stress tests its portfolio for interest rate risk and uses 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 net interest income ("NII") as well as duration gap analysis. MVE

represents management's estimate of the present value of all future cash flows from on- and off-balance sheet assets, liabilities, and financial derivatives, discounted at current interest rates and appropriate spreads. However, MVE is not indicative of the market value of Farmer Mac as a going concern because these market values are theoretical and do not reflect future business activities. MVE sensitivity analysis is used to measure the degree to which the market values of Farmer Mac's assets and liabilities change for a given change in interest rates. Because this analysis evaluates the impact of interest rate movements on the value of all future cash flows, this measure provides an evaluation of Farmer Mac's long-term interest rate risk.

Farmer Mac's NII is the difference between the yield on its interest-earning assets and its funding costs. Farmer Mac's NII may be affected by changes in market interest rates resulting from timing differences between maturities and re-pricing characteristics of assets and liabilities. The direction and magnitude of any such effect depends on the direction and magnitude of the change in interest rates as well as the composition of Farmer Mac's portfolio. The NII forecast represents an estimate of the net interest income that Farmer Mac's current portfolio is expected to produce over a twelve-month horizon. As a result, NII sensitivity statistics provide a short-term view of Farmer Mac's interest rate sensitivity.

Duration is a measure of a financial instrument's sensitivity to small changes in interest rates. Duration gap is the difference between the estimated durations of Farmer Mac's assets and liabilities. Because duration is a measure of market value sensitivity, duration gap summarizes the extent to which estimated market value sensitivities for assets and liabilities are matched. Duration gap provides a relatively concise measure of the interest rate risk inherent in Farmer Mac's outstanding book of business.

A positive duration gap denotes that the duration of Farmer Mac's assets is greater than the duration of its liabilities. A positive duration gap indicates that the market value of Farmer Mac's assets is more sensitive to small interest rate movements than is the market value of its liabilities. Conversely, a negative duration gap indicates that Farmer Mac's assets are less sensitive to small interest rate movements than are its liabilities.

Each of the metrics is produced using asset/liability models and is derived based on management's best estimates of such factors as projected interest rates, interest rate volatility, and prepayment speeds. Accordingly, these metrics should be understood as estimates rather than precise measurements. In addition, actual results may differ to the extent there are material changes to Farmer Mac's portfolio or changes in strategies undertaken to mitigate unfavorable sensitivities to interest rate changes.

The following schedule summarizes the results of Farmer Mac's MVE and NII sensitivity analysis as of September 30, 2016 and December 31, 2015 to an immediate and instantaneous uniform or "parallel" shift in the yield curve:

Table 22

Interest Rate Scenario	Percentage Change in MVE from Base Case	
	As of September 30, 2016	As of December 31, 2015
+100 basis points	3.3 %	0.7 %
-25 basis points	(2.3)%	(1.3)%

Interest Rate Scenario	Percentage Change in NII from Base Case	
	As of September 30, 2016	As of December 31, 2015
+100 basis points	3.3 %	4.4 %
-25 basis points	(1.0)%	(0.4)%

Farmer Mac's board of directors has established policies and procedures regarding MVE and NII sensitivity. These policies include the measurement of MVE and NII sensitivity to more severe decreasing interest rate scenarios that are consistent in magnitude with the increasing interest rate scenarios. However, given the low interest rate environment, such rate scenarios produce negative interest rates, and, as a result, do not produce results that are meaningful. Consequently, Farmer Mac measures and reports MVE and NII sensitivity to a down 25 basis point interest rate shock.

As of September 30, 2016, Farmer Mac's effective duration gap was negative 3.4 months, compared to negative 1.6 months as of December 31, 2015. During the first nine months of 2016, long term interest rates decreased sharply. This rate movement shortened the duration of Farmer Mac's mortgage assets relative to its liabilities, thereby widening slightly Farmer Mac's duration gap. Farmer Mac's overall interest rate sensitivity remained relatively stable and at relatively low levels during the quarter.

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

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

As of September 30, 2016, Farmer Mac had \$8.2 billion combined notional amount of interest rate swaps, with terms ranging from less than one year to twenty-five years, of which \$2.3 billion were pay-fixed interest rate swaps, \$5.5 billion were receive-fixed interest rate swaps, and \$0.5 billion were basis swaps.

Farmer Mac enters into interest rate swap contracts to synthetically adjust the characteristics of its debt to match more closely the cash flow and duration characteristics of its loans and other assets, thereby reducing interest rate risk and often times deriving an overall lower effective cost of borrowing than would

otherwise be available to Farmer Mac in the conventional debt market. Specifically, interest rate swaps synthetically convert the variable cash flows related to the forecasted issuance of short-term debt into effectively fixed rate medium-term notes that match the anticipated duration and interest rate characteristics of the corresponding assets. Farmer Mac evaluates the overall cost of using the swap market as a funding alternative and uses interest rate swaps to manage specific interest rate risks for specific transactions. Certain financial derivatives are designated as fair value hedges of fixed rate assets classified as available-for-sale to protect against fair value changes in the assets related to a benchmark interest rate (e.g., LIBOR).

Farmer Mac has used callable interest rate swaps (in conjunction with the issuance of short-term debt) as an alternative to callable medium-term notes with equivalently structured maturities and call options. The call options on the swaps are designed to match the prepayment options on those assets without prepayment protection. The blended durations of the swaps are also designed to match the duration of the related assets over their estimated lives. If the assets prepay, the swaps can be called and the short-term debt repaid; if the assets do not prepay, the swaps remain outstanding and the short-term debt is rolled over, effectively providing fixed rate callable funding over the lives of the related assets. Thus, the economics of the assets are closely matched to the economics of the interest rate swap and funding combination.

In addition to being exposed to the risk of asset and liability cash flow mismatches, Farmer Mac is exposed to the risk related to changes in its cost of funds relative to floating rate market indexes (such as LIBOR) on some of the floating rate assets it holds. This exposure is referred to as "basis risk." Some of Farmer Mac's floating rate assets reset on rate adjustment dates on the basis of a floating rate market index, whereas the related debt that Farmer Mac issued to fund those assets until their maturities may be refinanced on the basis of Farmer Mac's cost of funds at a particular time. Basis risk arises from the potential variability between the rates at which those floating rate assets reset and the rates at which Farmer Mac can issue debt to fund those assets. Farmer Mac can fund these floating rate assets 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 that match the maturities of the assets;
- issuing non-maturity matched, floating rate medium-term notes; or
- issuing non-maturity matched, fixed-rate discount notes or medium-term notes swapped to match the interest rate reset dates of the assets as an alternative source of effectively floating rate funding.

Farmer Mac typically uses the last option identified in the list above to fund these floating rate assets because this funding strategy is usually the most effective way to provide an interest rate match, maintain a suitable liquidity profile, and lower Farmer Mac's cost of funds. 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 for the remaining life of the assets. However, if the rates on Farmer Mac's discount notes or medium-term notes deteriorate relative to LIBOR during the time between when these floating rate assets were first funded and when Farmer Mac refinances the associated debt, Farmer Mac is exposed to a commensurate reduction in its net effective spread on the associated assets. Conversely, if the rates on Farmer Mac's discount notes or medium-term notes improve relative to LIBOR during that time, Farmer Mac would benefit from a commensurate increase in its net effective spread on those assets.

Farmer Mac is also subject to basis risk on some of its fixed rate assets as a result of its use of pay-fixed interest rate swaps, combined with a series of discount note or medium-term note issuances, as an alternative source of effectively fixed rate funding. This risk arises because the rates at which Farmer Mac refinances its funding for some fixed rate assets through the issuance of discount notes or medium-term notes may vary from the agreed-upon rates based on the floating rate market index received by Farmer Mac on the associated swaps. In these cases, if the rates on Farmer Mac's discount notes or medium-term notes were to deteriorate relative to LIBOR, Farmer Mac would be exposed to a commensurate reduction in its net interest income and net effective spread. Conversely, if the rates on Farmer Mac's discount notes or medium-term notes were to improve relative to LIBOR, Farmer Mac would benefit from a commensurate increase in its net interest income and net effective spread.

To mitigate this basis risk, Farmer Mac seeks to issue debt of sufficient maturity to reduce the frequency of required refinancing of that debt over the life of the associated asset. As of September 30, 2016, Farmer Mac held \$6.3 billion of floating-rate assets in its lines of business and its liquidity investment portfolio that reset on the basis of floating rate market indexes, primarily one-month and three-month LIBOR. As of the same date, Farmer Mac also had \$2.3 billion of interest rate swaps outstanding where Farmer Mac pays a fixed rate of interest and receives a floating rate of interest.

During fourth quarter 2015, the levels at which Farmer Mac issued discount notes and medium-term notes deteriorated versus LIBOR. Farmer Mac believes that this deterioration was caused by a significant compression of spreads between U.S. Treasury interest rates and corresponding interest rate swap rates, and was not related to any developments specific to Farmer Mac. In response to this deterioration, Farmer Mac has slightly shortened the maturity profile of its effectively floating rate debt and increased its pricing targets on new floating rate and certain fixed rate asset purchases. Although short-term funding levels improved somewhat during second quarter and third quarter 2016, Farmer Mac's funding costs relative to LIBOR continue to be less attractive compared to its historical experience for certain LIBOR-based funding products.

As discussed in Note 4 to the consolidated financial statements, all financial derivatives are recorded on the balance sheet at fair value as a freestanding asset or liability. Changes in the fair values of financial derivatives are reported in "(Losses)/gains on financial derivatives and hedging activities" 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 also reported in "(Losses)/gains on financial derivatives and hedging activities" in the consolidated statements of operations. The accrual of the contractual amounts due on the financial derivative is included as an adjustment to the yield of the hedged item and is reported in net interest income. For financial derivatives designated in cash flow hedge accounting relationships, the effective portion of the derivative gain/loss is recorded in other comprehensive income; amounts are disclosed as a reclassification out of other comprehensive income and affecting net interest income when the hedged transaction occurs and affects earnings. Any ineffective portion of designated hedge transactions is recognized immediately in "(Losses)/gains on financial derivatives and hedging activities". All of Farmer Mac's financial derivative transactions are conducted under standard collateralized agreements that limit Farmer Mac's potential credit exposure to any counterparty. As of September 30, 2016, Farmer Mac had no uncollateralized net exposures. As of December 31, 2015, Farmer Mac had uncollateralized net exposures of \$47,000 to one counterparty.

Liquidity and Capital Resources

Farmer Mac regularly accesses the capital markets for funding, and Farmer Mac has maintained access to the capital markets at favorable rates throughout 2015 and the first nine months of 2016. 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 also has a liquidity contingency plan to manage unanticipated disruptions in its access to the capital markets. That plan involves borrowing through repurchase agreement arrangements and the sale of liquid assets. Farmer Mac is required to maintain a minimum of 90 days of liquidity under the Liquidity and Investment Regulations. In accordance with the methodology for calculating available days of liquidity prescribed by those regulations, Farmer Mac maintained an average of 147 days of liquidity during third quarter 2016 and had 151 days of liquidity as of September 30, 2016.

Debt Issuance. Farmer Mac funds its purchases of eligible loan assets and investment assets and finances its operations primarily by issuing debt obligations of various maturities through a network of dealers in the public capital markets. Farmer Mac works to enhance its funding operations by undertaking extensive debt investor relations initiatives, including conducting non-deal roadshows with institutional investors, making periodic dealer sales force presentations, and speaking at fixed income investor conferences throughout the United States. Debt obligations issued by Farmer Mac include discount notes and fixed and floating rate medium-term notes, including callable notes.

Farmer Mac's board of directors has authorized the issuance of up to \$18.0 billion of discount notes and medium-term notes (of which \$14.1 billion was outstanding as of September 30, 2016), subject to periodic review of the adequacy of that level relative to Farmer Mac's borrowing requirements. Farmer Mac invests the proceeds of its debt issuances in purchases of loans, USDA Securities, Farmer Mac Guaranteed Securities, and investment assets in accordance with policies established by its board of directors and subject to regulations established by FCA.

Liquidity. The funding and liquidity needs of Farmer Mac's lines of business are driven by the purchase and retention of eligible loans, USDA Securities, and Farmer Mac Guaranteed Securities (including AgVantage securities); the maturities of Farmer Mac's discount notes and medium-term notes; and payment of principal and interest on Farmer Mac Guaranteed Securities. Farmer Mac's primary sources of funds to meet these needs are the proceeds of its debt issuances, fees for its guarantees and commitments, net effective spread, loan repayments, and maturities of AgVantage securities.

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. The following table presents these assets as of September 30, 2016 and December 31, 2015:

Table 23

	As of September 30, 2016	As of December 31, 2015
	<i>(in thousands)</i>	
Cash and cash equivalents	\$ 313,581	\$ 1,210,084
Investment securities:		
Guaranteed by U.S. Government and its agencies	1,799,173	1,558,003
Guaranteed by GSEs	1,143,298	1,114,148
Corporate debt securities	15,019	19,985
Asset-backed securities	43,695	83,380
Total	<u>\$ 3,314,766</u>	<u>\$ 3,985,600</u>

Farmer Mac's asset-backed investment securities include callable, highly rated auction-rate certificates ("ARCs"), the interest rates on which are reset through an auction process, most commonly at intervals of 28 days, or at formula-based floating rates as set forth in the related transaction documents in the event of a failed auction. These formula-based floating rates, which may at times reset to zero, are intended to preserve the underlying principal balance of the securities and avoid overall cash shortfalls. Accordingly, payments of accrued interest may be delayed and are ultimately subject to cash availability. Beginning in mid-February 2008, there were widespread failures of the auction mechanism designed to provide regular liquidity to these types of securities. Consequently, Farmer Mac has not sold any of its ARCs into the auctions since that time. All ARCs held by Farmer Mac are collateralized entirely by pools of Federal Family Education Loan Program guaranteed student loans that are backed by the full faith and credit of the United States. Farmer Mac continues to believe that the credit quality of these securities is high, based on the underlying collateralization and the securities' ratings. To date, Farmer Mac has received all interest due on ARCs it holds and expects to continue to do so. Farmer Mac does not believe that the auction failures will affect Farmer Mac's liquidity or its ability to fund its operations or make dividend payments. All ARCs held by Farmer Mac are callable by the issuers at par at any time.

The carrying value of Farmer Mac's ARCs investments was \$17.6 million as of September 30, 2016, compared to \$44.9 million as of December 31, 2015. During the first quarter 2016, Farmer Mac sold two available-for-sale auction rate certificates and received gross proceeds of \$26.8 million, resulting in a realized loss of \$0.1 million, which Farmer Mac had recognized in third quarter 2015 as other-than-temporary impairment losses. As of September 30, 2016, Farmer Mac's carrying value of all of its ARCs investments was 89 percent of par. The discounted carrying value reflects uncertainty regarding the ability to obtain par in the absence of any active market trading. See Note 8 to the consolidated financial statements for more information on the carrying value of ARCs.

Capital. Farmer Mac is subject to the following capital requirements – minimum, critical, and risk-based. Farmer Mac is required to comply with the higher of the minimum capital requirement and the risk-based capital requirement. The minimum capital requirement is expressed as a percentage of on-balance sheet assets and off-balance sheet obligations. The critical capital requirement is equal to one-half of the minimum capital amount. Farmer Mac's statutory charter does not specify the required level of risk-based capital but directs FCA to establish a risk-based capital stress test for Farmer Mac, using specified stress test parameters. Certain enforcement powers are given to FCA depending on Farmer Mac's compliance with these capital standards. As of September 30, 2016, Farmer Mac was in compliance with its statutory capital requirements and was classified as within "level I" (the highest compliance level). See Note 7 to the consolidated financial statements for more information about Farmer Mac's capital position and see "Business—Government Regulation of Farmer Mac—Capital Standards" in Farmer Mac's Annual Report

on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016 for more information on the capital requirements applicable to Farmer Mac.

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, qualifying preferred stock, and accumulated other comprehensive income allocable to investments not included in one of the four operating lines of business). That policy imposes restrictions on Tier 1-eligible dividends and any discretionary bonus payments in the event that Tier 1 capital falls below specified thresholds. As of September 30, 2016 and December 31, 2015, Farmer Mac's Tier 1 capital ratio was 12.6% and 10.5%, respectively. The increase in the Tier 1 capital ratio from year-end was due primarily to an adjustment to eliminate certain interest rate risk components of the risk weighting of assets to reflect the fact that Farmer Mac pursues a match funding approach to funding its assets and therefore does not bear material interest rate risk in its portfolio. The impact of this change to eliminate certain interest rate risk components of risk weighted assets served to increase the Tier 1 capital ratio by 320 basis points. This increase was offset in part by an increase in risk weighted assets primarily resulting from growth in outstanding business volume. For more information about Farmer Mac's capital adequacy policy and FCA's rule on capital planning, see "Business—Government Regulation of Farmer Mac—Capital Standards" in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016. As of September 30, 2016, Farmer Mac was in compliance with its capital adequacy policy.

Farmer Mac II LLC redeemed all of the outstanding shares of Farmer Mac II LLC Preferred Stock on March 30, 2015, the initial redemption date, at a cash redemption price equal to the liquidation preference (the same as the par value) of \$1,000 per share, using the \$150.0 million in proceeds of the preferred stock offerings Farmer Mac completed in 2014 and cash on hand to fund this redemption. The redemption of the Farmer Mac II LLC Preferred Stock triggered the redemption of all of the outstanding FALConS on the same day. For more information on the Farmer Mac II LLC Preferred Stock and Farmer Mac's capital, see "Business—Financing—Equity Issuance—Non-Controlling Interest in Farmer Mac II LLC" and "Business—Government Regulation of Farmer Mac—Capital Standards" in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016.

Regulatory Matters

The Dodd-Frank Act contains a variety of provisions designed to regulate financial markets. Certain provisions of the Dodd-Frank Act, including those regarding derivatives, corporate governance, and executive compensation, apply to Farmer Mac. On October 22, 2015, the Federal Reserve Board, FCA, the Federal Deposit Insurance Corporation, the Federal Housing Finance Agency, and the Office of the Comptroller of the Currency adopted a joint final rule to establish minimum requirements for the exchange of initial and variation margin between swap dealers or major swap participants and their counterparties to non-cleared swaps. This final rule, which became effective earlier this year, establishes minimum requirements for the exchange of initial and variation margin between Farmer Mac and its swap dealer counterparties in non-cleared swaps transactions. On February 23, 2016, FCA published a proposed rule in the Federal Register to amend the Liquidity and Investment Regulations to comply with Section 939A of the Dodd-Frank Act by removing references and requirements relating to credit ratings and replacing them with other standards of creditworthiness, as well as to revise the eligibility criteria and exposure limits for certain types of investments. Farmer Mac submitted comments on this proposed rule to FCA on April 25, 2016. Farmer Mac does not expect that any of the final rules that have been adopted

under the Dodd-Frank Act (including the final rule establishing margin requirements for non-cleared swaps) or that are anticipated to be adopted (including the FCA's proposed rule that would replace references and requirements related to credit ratings with other standards of creditworthiness) will have a material effect on Farmer Mac's business activities and operations or financial condition. Farmer Mac will continue to monitor all applicable developments in the implementation of the Dodd-Frank Act and expects to be able to adapt successfully to any new applicable legislative and regulatory requirements.

On July 27, 2016, the FCA published a final rule in the Federal Register to address Farmer Mac's board governance and standards of conduct, including conflicts of interest, risk governance, and Farmer Mac's existing disclosure and reporting requirements. This final rule became effective on October 17, 2016. Farmer Mac does not expect that this final rule will have a material effect on Farmer Mac's business activities and operations or financial condition.

Other Matters

Common Stock Dividends. For each of the first, second, and third quarters of 2016, Farmer Mac paid a quarterly dividend of \$0.26 per share on all classes of its common stock. For each quarter in 2015, Farmer Mac paid a quarterly dividend of \$0.16 per share on all classes of its common stock. Farmer Mac's ability to declare and pay dividends on common stock could be restricted if it fails to comply with applicable capital requirements. See "Business—Government Regulation of Farmer Mac—Capital Standards—Enforcement Levels" in Farmer Mac's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on March 10, 2016.

Preferred Stock Dividends. For each of the first, second, and third quarters of 2016 and for each quarter of 2015, Farmer Mac paid the following quarterly dividends on its outstanding preferred stock:

- \$0.3672 per share on its 5.875% Non-Cumulative Preferred Stock, Series A;
- \$0.4297 per share on its 6.875% Non-Cumulative Preferred Stock, Series B; and
- \$0.3750 per share on its 6.000% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series C.

Supplemental Information

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

Table 24

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:							
September 30, 2016	\$ 282,690	\$ 155,657	\$ 119,201	\$ 20,000	\$ —	\$ 528,234	\$ 1,105,782
June 30, 2016	241,093	58,156	133,745	10,000	421,404	396,245	1,260,643
March 31, 2016	198,548	68,017	98,968	9,691	—	927,219	1,302,443
December 31, 2015	245,252	185,919	72,442	46,082	—	14,391	564,086
September 30, 2015	175,965	79,621	91,374	53,552	522,262	506,602	1,429,376
June 30, 2015	196,927	102,944	123,933	—	—	307,250	731,054
March 31, 2015	130,224	59,311	89,186	8,703	—	214,915	502,339
December 31, 2014	196,058	72,045	86,942	6,972	—	454,490	816,507
September 30, 2014	150,243	77,368	97,275	9,936	—	295,700	630,522
For the year ended:							
December 31, 2015	748,368	427,795	376,935	108,337	522,262	1,043,158	3,226,855
December 31, 2014	697,824	369,857	342,986	75,500	—	1,279,655	2,765,822

Table 25

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	\$ 47,221	\$ 7,954	\$ 39,192	\$ 22,626	\$ 26,522	\$ 58,177	\$ 559,895	\$ 761,587
Unscheduled	85,583	17,108	67,094	36,099	2,108	—	5,000	212,992
September 30, 2016	<u>\$ 132,804</u>	<u>\$ 25,062</u>	<u>\$106,286</u>	<u>\$ 58,725</u>	<u>\$ 28,630</u>	<u>\$ 58,177</u>	<u>\$ 564,895</u>	<u>\$ 974,579</u>
Scheduled	\$ 10,769	\$ 9,876	\$ 34,610	\$ 34,434	\$ 82	\$ 7,424	\$ 66,699	\$ 163,894
Unscheduled	64,184	8,947	54,119	68,535	—	—	—	195,785
June 30, 2016	<u>\$ 74,953</u>	<u>\$ 18,823</u>	<u>\$ 88,729</u>	<u>\$ 102,969</u>	<u>\$ 82</u>	<u>\$ 7,424</u>	<u>\$ 66,699</u>	<u>\$ 359,679</u>
Scheduled	\$ 42,555	\$ 17,866	\$ 42,619	\$ 42,969	\$ 25,966	\$ 4,140	\$ 589,847	\$ 765,962
Unscheduled	91,510	10,883	72,642	44,694	—	—	—	219,729
March 31, 2016	<u>\$ 134,065</u>	<u>\$ 28,749</u>	<u>\$115,261</u>	<u>\$ 87,663</u>	<u>\$ 25,966</u>	<u>\$ 4,140</u>	<u>\$ 589,847</u>	<u>\$ 985,691</u>
Scheduled	\$ 6,689	\$ 16,884	\$ 26,265	\$ 18,981	\$ 11,234	\$ 4,165	\$ 15,154	\$ 99,372
Unscheduled	59,280	22,534	78,250	33,809	—	—	—	193,873
December 31, 2015	<u>\$ 65,969</u>	<u>\$ 39,418</u>	<u>\$104,515</u>	<u>\$ 52,790</u>	<u>\$ 11,234</u>	<u>\$ 4,165</u>	<u>\$ 15,154</u>	<u>\$ 293,245</u>
Scheduled	\$ 37,524	\$ 11,178	\$ 45,943	\$ 19,785	\$ 25,662	\$ 4,033	\$ 609,524	\$ 753,649
Unscheduled	70,242	11,164	61,075	35,394	—	—	—	177,875
September 30, 2015	<u>\$ 107,766</u>	<u>\$ 22,342</u>	<u>\$107,018</u>	<u>\$ 55,179</u>	<u>\$ 25,662</u>	<u>\$ 4,033</u>	<u>\$ 609,524</u>	<u>\$ 931,524</u>
Scheduled	\$ 8,687	\$ 11,126	\$ 34,064	\$ 31,064	\$ 19	\$ —	\$ 9,245	\$ 94,205
Unscheduled	48,659	11,299	47,714	45,357	13,910	—	—	166,939
June 30, 2015	<u>\$ 57,346</u>	<u>\$ 22,425</u>	<u>\$ 81,778</u>	<u>\$ 76,421</u>	<u>\$ 13,929</u>	<u>\$ —</u>	<u>\$ 9,245</u>	<u>\$ 261,144</u>
Scheduled	\$ 39,803	\$ 21,163	\$ 53,747	\$ 33,388	\$ 25,805	\$ —	\$ 81,922	\$ 255,828
Unscheduled	59,731	16,687	68,330	38,914	390	—	—	184,052
March 31, 2015	<u>\$ 99,534</u>	<u>\$ 37,850</u>	<u>\$122,077</u>	<u>\$ 72,302</u>	<u>\$ 26,195</u>	<u>\$ —</u>	<u>\$ 81,922</u>	<u>\$ 439,880</u>
Scheduled	\$ 7,000	\$ 19,821	\$ 28,472	\$ 16,966	\$ —	\$ —	\$ 9,349	\$ 81,608
Unscheduled	29,284	21,907	58,882	31,890	—	—	—	141,963
December 31, 2014	<u>\$ 36,284</u>	<u>\$ 41,728</u>	<u>\$ 87,354</u>	<u>\$ 48,856</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 9,349</u>	<u>\$ 223,571</u>
Scheduled	\$ 37,361	\$ 11,560	\$ 45,631	\$ 18,123	\$ 43,612	\$ —	\$ 383,130	\$ 539,417
Unscheduled	59,601	15,002	54,683	29,539	—	—	—	158,825
September 30, 2014	<u>\$ 96,962</u>	<u>\$ 26,562</u>	<u>\$100,314</u>	<u>\$ 47,662</u>	<u>\$ 43,612</u>	<u>\$ —</u>	<u>\$ 383,130</u>	<u>\$ 698,242</u>
For the year ended:								
Scheduled	\$ 92,703	\$ 60,351	\$160,019	\$ 103,218	\$ 62,720	\$ 8,198	\$ 715,845	\$ 1,203,054
Unscheduled	237,912	61,684	255,369	153,474	14,300	—	—	722,739
December 31, 2015	<u>\$ 330,615</u>	<u>\$ 122,035</u>	<u>\$415,388</u>	<u>\$ 256,692</u>	<u>\$ 77,020</u>	<u>\$ 8,198</u>	<u>\$ 715,845</u>	<u>\$ 1,925,793</u>
Scheduled	\$ 95,761	\$ 69,434	\$174,882	\$ 93,089	\$ 67,356	\$ —	\$ 930,578	\$ 1,431,100
Unscheduled	197,308	60,231	215,971	138,980	74,786	—	—	687,276
December 31, 2014	<u>\$ 293,069</u>	<u>\$ 129,665</u>	<u>\$390,853</u>	<u>\$ 232,069</u>	<u>\$ 142,142</u>	<u>\$ —</u>	<u>\$ 930,578</u>	<u>\$ 2,118,376</u>

Table 26

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:								
September 30, 2016	\$3,338,484	\$ 441,417	\$2,224,827	\$ 2,020,834	\$ 993,139	\$ 874,527	\$ 7,354,511	\$ 17,247,739
June 30, 2016	3,188,598	466,479	2,175,456	1,960,358	1,001,769	932,704	7,391,172	17,116,536
March 31, 2016	3,022,458	485,302	2,206,029	1,929,582	991,851	518,724	7,061,626	16,215,572
December 31, 2015	2,957,975	514,051	2,253,273	1,918,277	1,008,126	522,864	6,724,254	15,898,820
September 30, 2015	2,778,692	553,469	2,171,869	1,898,625	982,078	518,229	6,725,017	15,627,979
June 30, 2015	2,710,493	575,811	2,199,266	1,862,430	954,188	—	6,827,939	15,130,127
March 31, 2015	2,570,912	598,236	2,178,100	1,814,918	968,117	—	6,529,934	14,660,217
December 31, 2014	2,540,222	636,086	2,240,866	1,798,034	985,609	—	6,396,941	14,597,758
September 30, 2014	2,380,448	677,814	2,256,175	1,759,948	978,637	—	5,951,800	14,004,822

Table 27

On-Balance Sheet Outstanding Business Volume				
	Fixed Rate	5- to 10-Year ARMs & Resets	1-Month to 3-Year ARMs	Total Held in Portfolio
	<i>(in thousands)</i>			
As of:				
September 30, 2016	\$ 5,278,332	\$ 2,212,946	\$ 4,869,765	\$ 12,361,043
June 30, 2016	5,201,386	2,157,342	4,867,336	12,226,064
March 31, 2016	4,942,566	2,296,767	4,468,045	11,707,378
December 31, 2015	4,923,163	2,271,960	4,118,366	11,313,489
September 30, 2015	4,889,894	2,147,916	4,049,361	11,087,171
June 30, 2015	5,136,559	2,118,999	4,102,075	11,357,633
March 31, 2015	5,006,542	2,020,600	3,857,363	10,884,505
December 31, 2014	5,020,085	2,002,943	3,697,272	10,720,300
September 30, 2014	4,823,897	1,919,353	3,324,703	10,067,953

The following table presents the quarterly net effective spread by segment:

Table 28

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
<i>(dollars in thousands)</i>												
For the quarter ended:												
September 30, 2016 ⁽¹⁾	\$ 10,703	1.90%	\$ 5,189	1.07%	\$ 2,643	1.05%	\$ 11,427	0.75%	\$ 2,237	0.24%	\$ 32,199	0.86%
June 30, 2016	9,875	1.78%	4,588	0.96%	2,562	1.03%	11,407	0.77%	2,594	0.29%	31,026	0.84%
March 31, 2016	9,461	1.71%	4,308	0.91%	2,538	1.02%	11,090	0.80%	2,552	0.26%	29,949	0.82%
December 31, 2015	9,381	1.72%	4,518	0.96%	2,845	1.14%	10,899	0.80%	2,306	0.26%	29,949	0.85%
September 30, 2015 ⁽¹⁾	9,628	1.80%	4,630	0.99%	2,907	1.18%	11,271	0.81%	1,951	0.25%	30,387	0.88%
June 30, 2015	9,681	1.82%	4,466	0.98%	2,838	1.18%	10,860	0.78%	1,942	0.25%	29,787	0.88%
March 31, 2015 ⁽²⁾	10,114	1.97%	4,225	0.95%	2,804	1.15%	10,425	0.77%	1,689	0.20%	29,257	0.86%
December 31, 2014 ⁽³⁾	8,682	1.71%	5,250	1.19%	2,908	1.18%	9,870	0.78%	1,732	0.26%	28,442	0.91%
September 30, 2014	8,207	1.68%	5,073	1.18%	2,890	1.16%	9,823	0.78%	3,773	0.59%	29,766	0.97%

⁽¹⁾ Net effective spread is a non-GAAP measure. See Note 9 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.

⁽²⁾ Beginning in first quarter 2015, Farmer Mac revised its methodology for interest expense allocation among the Farm & Ranch, USDA Guarantees, and Rural Utilities lines of business. As a result of this revision, a greater percentage of interest expense has been allocated to the longer-term assets included within the USDA Guarantees and Rural Utilities lines of business. Net effective spread for periods prior to the quarter ended March 31, 2015 does not reflect this revision.

⁽³⁾ On October 1, 2014, \$78.5 million of preferred stock issued by CoBank was called, resulting in a loss of net effective spread of \$2.1 million or 30 basis points in the corporate segment. The impact on consolidated net effective spread was 7 basis points.

The following table presents quarterly core earnings reconciled to net income attributable to common stockholders:

Table 29

Core Earnings by Quarter Ended									
	September 2016	June 2016	March 2016	December 2015	September 2015	June 2015	March 2015	December 2014	September 2014
	(in thousands)								
Revenues:									
Net effective spread	\$ 32,199	\$ 31,026	\$ 29,949	\$ 29,949	\$ 30,387	\$ 29,787	\$ 29,257	\$ 28,442	\$ 29,766
Guarantee and commitment fees	4,533	4,810	4,669	4,730	4,328	4,085	4,012	4,097	4,152
Other ⁽¹⁾	(32)	(125)	(517)	(284)	(93)	(24)	(405)	(1,285)	(2,001)
Total revenues	36,700	35,711	34,101	34,395	34,622	33,848	32,864	31,254	31,917
Credit related (income)/expense:									
(Release of)/provision for losses	(31)	458	63	(49)	(303)	1,256	(696)	(479)	(804)
REO operating expenses	—	—	39	44	48	—	(1)	48	1
(Gains)/losses on sale of REO	(15)	—	—	—	—	—	1	28	—
Total credit related (income)/expense	(46)	458	102	(5)	(255)	1,256	(696)	(403)	(803)
Operating expenses:									
Compensation and employee benefits	5,438	5,611	5,774	5,385	5,236	5,733	5,693	4,971	4,693
General and administrative	3,474	3,757	3,526	3,238	3,676	3,374	2,823	2,992	3,123
Regulatory fees	613	612	613	613	600	600	600	600	593
Total operating expenses	9,525	9,980	9,913	9,236	9,512	9,707	9,116	8,563	8,409
Net earnings	27,221	25,273	24,086	25,164	25,365	22,885	24,444	23,094	24,311
Income tax expense ⁽²⁾	9,497	8,956	8,444	8,855	8,924	8,091	6,692	4,858	6,327
Net (loss)/income attributable to non-controlling interest	(18)	(16)	(28)	(60)	(36)	(119)	5,354	5,414	5,412
Preferred stock dividends	3,295	3,296	3,295	3,296	3,295	3,296	3,295	3,296	3,283
Core earnings	\$ 14,447	\$ 13,037	\$ 12,375	\$ 13,073	\$ 13,182	\$ 11,617	\$ 9,103	\$ 9,526	\$ 9,289
Reconciling items:									
Unrealized gains/(losses) on financial derivatives and hedging activities	1,460	(2,076)	(2,989)	2,743	(6,906)	15,982	(895)	(5,719)	4,131
Unrealized gains/(losses) on trading assets	1,182	394	358	696	(8)	170	362	1,044	(32)
Amortization of premiums/discounts and deferred gains on assets consolidated at fair value	(157)	(371)	(281)	(263)	(117)	(125)	(814)	(1,247)	(678)
Net effects of settlements on agency forward contracts	464	466	(255)	(162)	(390)	197	(252)	(46)	113
Loss on retirement of Farmer Mac II LLC Preferred Stock	—	—	—	—	—	—	(8,147)	—	—
Income tax effect related to reconciling items	(1,032)	556	1,109	(1,055)	2,598	(5,679)	2,461	2,089	(1,237)
Net income attributable to common stockholders	\$ 16,364	\$ 12,006	\$ 10,317	\$ 15,032	\$ 8,359	\$ 22,162	\$ 1,818	\$ 5,647	\$ 11,586

⁽¹⁾ Fourth quarter 2014 and third quarter 2014 include \$13.6 million and \$17.9 million, respectively, of interest expense related to securities purchased under agreements to resell and securities sold, not yet purchased and \$12.8 million and \$16.4 million, respectively of gains on securities sold, not yet purchased.

⁽²⁾ Fourth quarter 2014 reflects a reduction of \$1.4 million in the tax valuation allowance against capital loss carryforwards related to capital gains on securities sold, not yet purchased.

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 such risk. For information regarding 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 (the "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 regarding 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 September 30, 2016.

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 September 30, 2016.

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 September 30, 2016 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

There were no material changes from the risk factors previously disclosed in Farmer Mac's Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 10, 2016.

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

(a) Farmer Mac is a federally chartered instrumentality of the United States and its debt and equity securities are exempt from registration pursuant to Section 3(a)(2) of the Securities Act of 1933.

During third quarter 2016, 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 499 shares of its Class C Non-Voting Common Stock on July 7, 2016 to the three 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 \$34.82 per share, which was the closing price of the Class C Non-Voting Common Stock on June 30, 2016 as reported by the New York Stock Exchange.

On August 2, 2016, Farmer Mac granted 400 shares of restricted Class C non-voting common stock under its 2008 Omnibus Incentive Plan at a grant price of \$37.60 per share to one employee. All of the shares of restricted stock granted will "cliff" vest on April 15, 2019 if the employee remains employed by Farmer Mac on that date.

(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 and Financial Statement Schedules

(3) Exhibits.

*	3.1	—	Title VIII of the Farm Credit Act of 1971, as most recently amended by the Food, Conservation and Energy Act of 2008 (Previously filed as Exhibit to Form 10-Q filed August 12, 2008).
*	3.2	—	Amended and Restated By-Laws of the Registrant (Previously filed as Exhibit 3.1 to Form 8-K filed June 9, 2014).
*	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 5.875% Non-Cumulative Preferred Stock, Series A (Previously filed as Exhibit 4.4.1 to Form 10-Q filed May 9, 2013).
*	4.4.1	—	Certificate of Designation of Terms and Conditions of 5.875% Non-Cumulative Preferred Stock, Series A (Previously filed as Exhibit 4.1 to Form 8-A filed January 17, 2013).
*	4.5	—	Specimen Certificate for 6.875% Non-Cumulative Preferred Stock, Series B (Previously filed as Exhibit 4.5 to Form 10-Q filed May 12, 2014).
*	4.5.1	—	Certificate of Designation of Terms and Conditions of 6.875% Non-Cumulative Preferred Stock, Series B (Previously filed as Exhibit 4.1 to Form 8-A filed March 25, 2014).
*	4.6	—	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).
*	4.6.1	—	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).
**	31.1	—	Certification of Registrant's principal executive officer relating to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, 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 September 30, 2016, 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 September 30, 2016, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Incorporated by reference to the indicated prior filing.

** Filed with this report.

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

<u>/s/ Timothy L. Buzby</u>	<u>November 9, 2016</u>
By: Timothy L. Buzby President and Chief Executive Officer (Principal Executive Officer)	Date
<u>/s/ R. Dale Lynch</u>	<u>November 9, 2016</u>
By: R. Dale Lynch Executive Vice President – Chief Financial Officer (Principal Financial Officer)	Date