KEITHLEY INSTRUMENTS INC Form 4

March 12, 2003

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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

# FORM 4

### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

O Check this box if no longer subject to Section 16.
Form 4 or Form 5 obligations may continue.
See Instruction 1(b)

1.	Person* (	me and Address of Reporting rson* (Last, First, Middle) rtlett, James T			Trad	er Name and Ticker ling Symbol aley Instruments, Inc		3.		cation Number of Reporting entity (Voluntary)		
	13515 Sha Apt. 8-B	ıker Blvd		4.		ement for ( <i>Month/Do</i>	ay/Year)	5.	If Amendment, Date of Original (Month/Day/Year)			
	(Street)		6.	Relationship of Reporting Person(s) to Issuer (Check All Applicable)				Individual or Joint/Group Filing (Check Applicable Line)				
	Cleveland,	, OH 44120		_	X	Director O	10% Owner		X	Form filed by One Reporting Person		
	(City) (State) (Zip)			0	Officer (give title) Other (specify be	,		o	Form filed by More than One Reporting Person			

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, *see* instruction 4(b)(v).

			Tabl	e I	Non-Derivative Se	cu	rities Acquir	ed, Disposed of, or	Вє	eneficially Own	ed			
1.	Title of Security (Instr. 3)	2.	Transaction Date (Month/Day/Year)	2a.	Deemed Execution Date, if any. (Month/Day/Year)	3.	Transaction4. Code (Instr. 8)	Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5.	Amount of 6. Securities Beneficially Owned Following Reported Transactions(s) (Instr. 3 and 4)	Fo D Ir (I	wnership orm: irect (D) or adirect (I) nstr. 4)	7.	Nature of Indirect Beneficial Ownership (Instr. 4)
							Code V	(A) or Amount (D) Price						
	Common Shares									-0-				
_						_			_					
_														
							Page 2							

 $\begin{tabular}{ll} \textbf{Table II} & \textbf{Derivative Securities Acquired, Disposed of, or Beneficially Owned} \\ & (e.g., puts, calls, warrants, options, convertible securities) \end{tabular}$ 

Fitle of Derivative Security (Instr. 3)	2.	Conversion or Exercise 3. Price of Derivative Security	Transaction Date (Month/Day/Year)	3a.	Deemed Execution Date, if any (Month/Day/Year)	4.	Transaction 5. Code (Instr. 8)	Securities	(A) or Dispose
							Code V	(A)	( <b>D</b> )
Common Stock Option		\$17.78125	2/12/00						

 $\begin{tabular}{ll} \textbf{Table II} & \textbf{Derivative Securities Acquired, Disposed of, or Beneficially Owned} & \textbf{Continued} \\ & (\textit{e.g.}, \textbf{puts, calls, warrants, options, convertible securities}) \end{tabular} \begin{tabular}{ll} \textbf{Continued of the properties} & \textbf{C$ 

6.	Date Exercis Expiration I (Month/Day/	<b>Date</b>	7. Title and of Underly Securities (Instr. 3 and	ying	S. Price of Derivative Securities Beneficially Owned  (Instr. 5) Following Reported Transaction(s)  (Instr. 4)		10.	Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11.	Nature of Indirect Beneficial Ownership (Instr. 4)
	Date Expiration Nur		Amount or Number of Shares							
	8/13/00	2/12/10	Common Stk	10,000	\$ -	10,000		D		
	8/18/01	2/17/11	Common Stk	10,000	\$ -	10,000		D		
	8/17/02	2/16/12	Common Stk	10,000	\$ -	10,000		D		
	8/16/03	2/15/13	Common Stk	10,000	\$ -	10,000		D		
	9/30/02	(1)	Common Stk	549.18	\$ -	549.18		D		
	9/30/02	(1)	Common Stk	723.04	\$ -	723.04		D		
	9/30/02	(1)	Common Stk	22.36	\$ -	22.36		D		
	9/30/02	(1)	Common Stk	570.72	\$ -	570.72		D		
	1/1/02	(1)	Common Stk	822.72	\$ -	822.72		D		
	1/1/02	(1)	Common Stk	507.50	\$ -	507.50		D		

1/1/02	(1)	Common Stk	776.54	\$ -	776.54	D	
1/1/02	(1)	Common Stk	375.64	\$ -	375.64	D	
1/1/02	(1)	Common Stk	810.04	\$ -	810.04	D	
1/1/02	(1)	Common Stk	660.32	\$ -	660.32	D	
1/1/02	(1)	Common Stk	819.10	\$ -	819.10	D	
1/1/02	(1)	Common Stk	902.08	\$ -	902.08	D	
1/1/02	(1)	Common Stk	232.98	\$ -	232.98	D	
1/1/02	(1)	Common Stk	376.94	\$ -	376.94	D	
1/1/02	(1)	Common Stk	195.26	\$ -	195.26	D	
1/1/02	(1)	Common Stk	766.88	\$ -	766.88	D	
1/2/03	(1)	Common Stk	488.26	\$ -	488.26	D	
1/2/03	(1)	Common Stk	189.08	\$ -	189.08	D	
1/2/03	(1)	Common Stk	706.82	\$ -	706.82	D	
1/2/03	(1)	Common Stk	162.42	\$ -	162.42	D	
1/2/03	(1)	Common Stk	984.22	\$ -	984.22	D	
1/2/03	(1)		372.62	\$ -	372.62	D	

		Common Stk					
1/2/03	(1)	Common Stk	1027.78	\$ -	1027.78	D	
1/2/03	(1)	Common Stk	473.44	\$ -	473.44	D	
1/2/03	(1)	Common Stk	1301.78	\$ -	1301.78	D	
1/2/03	(1)	Common Stk	589.80	\$ -	589.80	D	
1/2/03	(1)	Common Stk	936.44	\$ -	936.44	D	
1/2/03	(1)	Common Stk	1184.68	\$ -	1184.68	D	
1/2/03	(1)	Common Stk	290.84	\$ -	290.84	D	
1/2/03	(1)	Common Stk	511.72	\$ -	511.72	D	
1/2/03	(1)	Common Stk	1298.00	\$ -	1298.00	D	
1/2/03	(1)	Common Stk	230.46	\$ -	230.46	D	
1/2/03	(1)	Common Stk	136.56	\$ -	136.56	D	
1/2/03	(1)	Common Stk	94.37	\$ -	94.37	D	
1/2/03	(1)	Common Stk	31.25	\$ -	31.25	D	
1/2/03	(1)	Common Stk	54.68	\$ -	54.68	D	
1/2/06	(1)		130.12	\$ -	130.12	D	

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Common Stk

1/2/06	(1)	Common Stk	154.75	\$ -	154.75	D	
1/2/06	(1)	Common Stk	234.55	\$ -	234.55	D	
1/2/06	(1)	Common Stk	227.21	\$ -	227.21	D	
1/2/06	(1)	Common Stk	321.89	\$ -	321.89	D	
1/2/07	(1)	Common Stk	237.25	\$ -	237.25	D	
1/2/07	(1)	Common Stk	155.68	\$ -	155.68	D	
1/2/07	(1)	Common Stk	405.54	\$ -	405.54	D	
1/2/07	(1)	Common Stk	243.77	\$ -	243.77	D	
1/2/07	(1)	Common Stk	470.00	\$ -	470.00	D	
1/2/08	(1)	Common Stk	525.94	\$ -	525.94	D	
1/2/08	(1)	Common Stk	234.85	\$ -	234.85	D	

#### **Explanation of Responses:**

(1) The phantom stock units were accrued under the Keithley Instruments, Inc. Deferred Stock Plan and are to be settled in common stock to the reporting person on the exercisable date or upon retirement from the board whichever occurs later.

Mark J. Plush, Attorney-in-Fact	3/10/03
**Signature of Reporting Person	Date

<sup>\*\*</sup> Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

#### Page 4

-align: center">Before Net of Before Net of (Dollars in thousands) Tax Tax Tax Tax Tax Tax Amount Effect Amount Amount Effect Amount Net income \$1,356 \$29 \$1,385 \$1,333 \$(127) \$1,206 Other comprehensive income (loss): Unrealized (losses) gains on available for sale securities: Unrealized holding (losses) gains arising during the period (645) 135 (510) (20) 7 (13)Unrealized holding gains from unconsolidated subsidiary - - - (3) - (3)Less reclassification adjustment for (gains) losses included in net income for sales of debt securities (1) (3) - - - (2) 1 (1)Unrecognized pension net gain (2) (3) (55) 12 (43) - - - Unrecognized pension gain due to change in assumptions (2) (3) 1,010 (212) 798 - - - Amortization of pension net actuarial cost (2) (3) 242 (51) 191 57 (20) 37 Other comprehensive income (loss) 552 (116) 436 32 (12) 20 Total comprehensive income \$1,908 \$(87) \$1,821 \$1,365 \$(139) \$1,226

	Nine Mo	nths End	led Septen	nber 30,	•				
	2018			2017					
	Before		Net of	Before		Net of			
(Dollars in thousands)	Tax	Tax	Tax	Tax	Tax	Tax			
	Amount	Effect	Amount	Amount	Effect	Amount			
Net income	\$4,215	\$66	\$4,281	\$4,660	\$(701)	\$3,959			
Other comprehensive (loss) income:									
Unrealized (losses) gains on available for sale securities:									
Unrealized holding (losses) gains arising during the period	(3,340)	701	(2,639)	882	(300)	582			
Unrealized holding gains from unconsolidated subsidiary	5	-	5	12	-	12			
Less reclassification adjustment for losses (gains) included in	15	(3)	12	(510)	174	(336)			
net income for sales of debt securities (1) (3)	13	(3)	12	(310)	1/7	(330 )			
Unrecognized pension net gain (2) (3)	(55)	12	(43)	-	-	-			
Unrecognized pension gain due to change in assumptions (2)	1,010	(212)	798						
(3)	1,010	(212)	190	-	-	-			
Amortization of pension net actuarial cost (2) (3)	323	(68)	255	170	(58)	112			
Other comprehensive (loss) income	(2,042)	430	(1,612)	554	(184)	370			
Total comprehensive income	\$2,173	\$496	\$2,669	\$5,214	\$(885)	\$4,329			

<sup>(1)</sup> Amounts are included in (loss) gain on sales and calls of securities on the consolidated statements of income as a separate element within total non-interest income.

See Notes to Consolidated Financial Statements

<sup>(2)</sup> Amounts are included in the computation of net periodic benefit cost and are included in employee benefits expense on the consolidated statements of income as a separate element within total non-interest expense.

<sup>(3)</sup> Income tax amounts are included in the provision for income taxes on the consolidated statements of income.

### Juniata Valley Financial Corp. and Subsidiary Consolidated Statements of Stockholders' Equity (Unaudited) For the Nine Months Ended September 30, 2018

	Number				Accumul	lated		
	of				Other		Total	
(Dollars in thousands, except share data)	Shares	Commo	n	Retained	Compreh	nens <b>Tve</b> asur	yStockhol	ders'
	Outstanding	Stock	Surplus	Earnings	Loss	Stock	Equity	
Balance, January 1, 2018	4,767,656	\$4,811	\$18,565	\$40,876	\$ (4,034	) \$(831)	\$59,387	
Net income				4,281			4,281	
Other comprehensive loss					(1,612	)	(1,612	)
Reclassification for ASU 2016-01				156	(156	)	-	
Cash dividends at \$0.66 per share				(3,290)			(3,290	)
Stock-based compensation			60				60	
Purchase of treasury stock	(1,928)					(40)	(40	)
Treasury stock issued for stock plans	5,170		(7)			98	91	
Common stock issued for stock plans	7,354	8	34				42	
Common stock issued for acquisition	315,284	315	6,148				6,463	
Balance, September 30, 2018	5,093,536	\$5,134	\$24,800	\$42,023	\$ (5,802	) \$(773)	\$65,382	

Juniata Valley Financial Corp. and Subsidiary Consolidated Statements of Stockholders' Equity (Unaudited) For the Nine Months Ended September 30, 2017

	Number				Accumul	ated		
	of				Other		Total	
(Dollars in thousands, except share data)	Shares	Commo	n	Retained	Compreh	ens <b>Tve</b> asur	yStockhol	ders'
	Outstanding	Stock	Surplus	Earnings	Loss	Stock	Equity	
Balance, January 1, 2017	4,755,630	\$4,805	\$18,476	\$39,945	\$ (3,209	) \$(927)	\$59,090	
Net income				3,959			3,959	
Other comprehensive loss					370		370	
Cash dividends at \$0.66 per share				(3,145)			(3,145	)
Stock-based compensation			54				54	
Purchase of treasury stock	(4,289)					(86)	(86	)
Treasury stock issued for stock plans	9,704		(10)	)		182	172	
Common stock issued for stock plans	6,611	6	28				34	
Balance, September 30, 2017	4,767,656	\$4,811	\$18,548	\$40,759	\$ (2,839	) \$(831)	\$60,448	

See Notes to Consolidated Financial Statements

### Juniata Valley Financial Corp. and Subsidiary Consolidated Statements of Cash Flows (Unaudited)

(Dollars in thousands)	Nine Months September 30		ed	
	2018		2017	
Operating activities:				
Net income	\$ 4,281		\$ 3,959	
Adjustments to reconcile net income to net cash provided by operating activities:				
Provision for loan losses	231		389	
Depreciation	604		487	
Net amortization of securities premiums	412		490	
Net amortization of loan origination fees	43		48	
Deferred net loan origination costs	(348	)	(297	)
Amortization of core deposit intangible asset	54		52	
Amortization of investment in low income housing partnership	600		412	
Net (amortization) accretion of purchase fair value adjustments	(58	)	4	
Net realized loss (gain) on sales and calls of available for sale securities	15		(510	)
Change in value of equity securities	(42	)	_	
Net gain on sales and valuation of other real estate owned	(62	)	(26	)
Earnings on bank owned life insurance and annuities	(266	)	(269	)
Deferred income tax benefit	(113	)	(34	)
Equity loss (gain) in unconsolidated subsidiary, net of dividends of \$75 and \$49,	•	,	•	
respectively	194		(105	)
Equity gain from acquisition of unconsolidated subsidiary	(415	)	-	
Stock-based compensation expense	60	,	54	
Mortgage loans originated for sale	_		(3,527	)
Proceeds from mortgage loans sold to others	71		3,563	
Mortgage banking income	(53	)	(170	)
Increase in accrued interest receivable and other assets	(958	)	(1,360	)
(Decrease) increase in accrued interest payable and other liabilities	(928	)	146	
Net cash provided by operating activities	3,322	•	3,306	
Investing activities:				
Purchases of:				
Securities available for sale	(4,119	)	(42,510	)
Premises and equipment	(252	)	(324	)
Bank owned life insurance and annuities	(35	)	(36	)
Proceeds from:	`	,	`	
Sales of securities available for sale	4,285		21,800	
Maturities of and principal repayments on securities available for sale	10,137		12,407	
Redemption (purchase) of FHLB stock	1,058		(6	)
Sale of other real estate owned	296		617	
Sale of other assets	22		25	
Net cash received from acquisition	7,561		_	
Investment in low income housing partnerships	(100	)	(1,919	)
Net decrease in interest bearing time deposits with banks	490	,		,

Net increase in loans	(2,691	)	(4,809	)
Net cash provided by (used in) investing activities	16,652		(14,755	)
Financing activities:				
Net increase in deposits	16,071		17,756	
Net (decrease) increase in short-term borrowings and securities sold under	(17,417	)	511	
agreements to repurchase	(17,717	,	311	
Repayment of long-term debt	(10,000	)	-	
Cash dividends	(3,290	)	(3,145	)
Purchase of treasury stock	(40	)	(86	)
Treasury stock issued for employee stock plans	91		-	
Common stock issued for employee stock plans	42		206	
Net cash (used in) provided by financing activities	(14,543	)	15,242	
Net increase in cash and cash equivalents	5,431		3,793	
Cash and cash equivalents at beginning of year	9,897		9,559	
Cash and cash equivalents at end of period	\$ 15,328		\$ 13,352	

### Juniata Valley Financial Corp. and Subsidiary Consolidated Statements of Cash Flows (Unaudited)

(Dollars in thousands)	Nine Months Ended Septem 2018 2017			•
Supplemental information:				
Interest paid	\$	2,619	\$	2,051
Income taxes paid		14		385
Supplemental schedule of noncash investing and financing activities:				
Transfer of loans to other real estate owned	\$	67	\$	529
Transfer of loans to repossessed vehicles		12		5
Supplemental schedule of assets and liabilities in connection with merger:				
Assets acquired:				
Investment in time deposits with banks	\$	3,675		
Loans		31,331		
Premises and equipment		125		
Accrued interest receivable		123		
Core deposit and other intangible assets		289		
Bank owned life insurance		632		
FHLB stock		124		
Other assets		267		
	\$	36,566		
Liabilities assumed:				
Deposits	\$	36,052		
Accrued interest payable and other liabilities		266		
	\$	36,318		

See Notes to Consolidated Financial Statements

#### JUNIATA VALLEY FINANCIAL CORP. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

#### 1. Basis of Presentation and Accounting Policies

The consolidated financial statements include the accounts of Juniata Valley Financial Corp. (the "Company" or "Juniata") and its wholly owned subsidiary, The Juniata Valley Bank (the "Bank" or "JVB"). All significant intercompany accounts and transactions have been eliminated.

On April 30, 2018, the Company, which previously owned 39.16% of Liverpool Community Bank ("Liverpool" or "LBC"), completed the acquisition of the remainder of Liverpool's outstanding common stock. Liverpool was merged with and into the Bank. Refer to Note 3 for more information.

The accompanying unaudited consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information. Accordingly, they do not include all of the information and footnotes required by U.S. generally accepted accounting principles ("U.S. GAAP") for complete consolidated financial statements. Certain items in prior financial statements have been reclassified to conform to the current presentation. In the opinion of management, all adjustments considered necessary for fair presentation have been included. Operating results for the three and nine month periods ended September 30, 2018 are not necessarily indicative of the results for the year ending December 31, 2018. For further information, refer to the consolidated financial statements and notes thereto included in Juniata Valley Financial Corp.'s Annual Report on Form 10-K ("Annual Report") for the year ended December 31, 2017.

The Company has evaluated events and transactions occurring subsequent to the consolidated statement of financial condition date of September 30, 2018 for items that should potentially be recognized or disclosed in these consolidated financial statements. The evaluation was conducted through the date these consolidated financial statements were issued.

#### 2. RECENT ACCOUNTING STANDARDS UPDATES ("ASU")

#### **Adoption of New Accounting Standards**

ASU 2014-09, Revenue from Contracts with Customers (606)

**Issued:** May 2014

**Summary:** The amendments in this Update establish a comprehensive revenue recognition standard for virtually all industries under U.S. GAAP, including those that previously followed industry-specific guidance. The revenue standard's core principle requires an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To accomplish this objective, the standard requires five basic steps: (i) identify the contract with the customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract, and (v) recognize revenue when (or as) the entity satisfies a performance obligation.

In August 2015, the FASB issued *ASU 2015-14*, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*. ASU 2015-14 deferred the effective date of the new revenue recognition standard by one year. As a result, the standard was effective for public entities in fiscal years beginning after December 15, 2017.

The Company adopted the ASU 2014-09 on January 1, 2018 and elected the modified retrospective transition method. Because the amended guidance does not apply to revenue associated with financial instruments accounted for under other U.S. GAAP, the Company assessed the effect the guidance had on the recognition processes of certain recurring revenue streams related to non-interest income, in addition to when it is appropriate to recognize a gain/loss on the transfer of nonfinancial assets, such as other real estate owned. The Company did not identify any significant changes in the timing of revenue recognition when considering the amended accounting guidance. Additional disclosures related to revenue recognition appear in Note 13.

ASU 2018-02, Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.

**Issued:** February 2018

**Summary:** The Update allows entities to reclassify from accumulated other comprehensive income ("AOCI") to retained earnings the 'stranded' tax effects of accounting for income tax rate changes on items accounted for in AOCI that were impacted by tax reform enacted in December 2017. Because the impact of tax rate changes is recorded in income, items accounted for in AOCI could be left with a stranded tax effect appearing as though those items do not reflect the appropriate tax rate. The FASB's changes were intended to improve the usefulness of information reported to financial statement users.

**Effective Date:** The changes are effective for years beginning after December 31, 2018, with early adoption permitted. The Company elected to adopt the changes in the first quarter of 2018, as of December 31, 2017. The amount transferred from AOCI to retained earnings totaled \$588,000 and represented the impact of the Company's corporate tax rate change from 34% to 21% at the date of enactment of the tax reform for the unrealized gains and losses on securities and the defined benefit plan accounted for in AOCI.

ASU 2016-01, Measurement of Financial Instruments

**Issued:** January 2016

**Summary:** The amendments in this Update require all equity investments to be measured at fair value with changes in the fair value recognized through net income (other than those changes accounted for under the equity method of accounting or those that result in consolidation of the investee). The amendments in this Update also require an entity to present separately in AOCI the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments. In addition, the Update emphasizes the existing requirement to use exit prices to measure fair value for disclosure purposes and clarifies that entities should not make use of a practicability exception in determining the fair value of loans. Accordingly, we refined the calculations used to determine the disclosed fair value of our loans as part of adopting this standard. The redefined calculation did not have a significant impact on our fair value disclosures.

**Effective Date:** For public entities, the amendments in the Update are effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The Company currently holds a small portfolio of equity investments for which the fair value fluctuates with market activity. The Company adopted ASU 2016-01 on January 1, 2018. As of this date, the Company had \$197,000 in unrealized gains on equity securities (see Note 6). The adoption of this Update resulted in a reclassification of \$156,000 from other comprehensive loss to retained earnings. The Company recorded a decline of \$4,000 during the three months ended September 30, 2018 and an increase of \$42,000 during the nine months ended September 30, 2018 for the change in fair value of equity securities on the consolidated statements of income.

ASU 2018-03, Technical Corrections and Improvements to Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities

Issued: February 2018

**Summary:** The FASB issued this Update to clarify certain aspects of the guidance on recognizing and measuring financial assets and liabilities in ASU 2016-01:

Clarification regarding the ability to discontinue application of the measurement alternative for equity securities without a readily determinable fair value;

Clarification of the measurement date for fair value adjustments to the carrying amount of equity securities without a readily determinable fair value for which the measurement alternative is elected;

Clarification of the unit of account for fair value adjustments to forward contracts and purchased options on equity securities without a readily determinable fair value for which the measurement alternative is expected to be elected;

• Presentation requirements for certain hybrid financial liabilities for which the fair value option is elected;

·Measurement of financial liabilities denominated in a foreign currency for which the fair value option is elected; and

Transition guidance for equity securities without a readily determinable fair value.

The amendments in ASU 2018-03 are effective for public business entities for fiscal years beginning after December 15, 2017 and for interim periods within those fiscal years beginning after June 15, 2018. For all other entities, the effective date is the same as the effective date for ASU 2016-01. All entities may early adopt the amendments, including adoption in an interim period, provided they have already adopted ASU 2016-01. The Company adopted this Update in conjunction with the adoption of ASU 2016-01 on January 1, 2018. The adoption had no material impact to the Company's consolidated financial position or results of operations.

#### ASU 2017-09, Scope of Modification Accounting

**Issued:** May 2017

**Summary:** ASU 2017-09 clarifies Topic 718 such that an entity must apply modification accounting to changes in the terms or conditions of a share-based payment award unless all of the following criteria are met:

The fair value of the modified award is the same as the fair value of the original award immediately before the modification. The standard indicates that if the modification does not affect any of the inputs to the valuation technique used to value the award, the entity is not required to estimate the value immediately before and after the modification.

- 2. The vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the modification.
- 3. The classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the modification.

**Effective Date:** The amendments were effective for all entities for fiscal years beginning after December 15, 2017, including interim periods within those years. The Company adopted ASU 2017-09 on January 1, 2018 and it had no material impact on the Company's consolidated financial position or results of operations.

**Issued:** March 2017

**Summary:** ASU 2017-08 shortens the amortization period for premiums on purchased callable debt securities to the earliest call date, rather than amortizing over the full contractual term. The ASU does not change the accounting for securities held at a discount.

**Effective Date:** The amendments are effective for public business entities for fiscal years beginning after December 15, 2018. Early adoption is permitted. The Company chose to early adopt this standard, and the financial statements as of, and for the year ended, December 31, 2017 reflected the impact of premium amortization on callable debt securities to the earliest call date. The adoption of this ASU did not have a material impact on the Company's consolidated financial statements.

ASU 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

**Issued: March 2017** 

**Summary:** ASU 2017-07 requires that an employer disaggregate the service cost component from the other components of net benefit cost. The amendments also provide explicit guidance on how to present the service cost component and the other components of net benefit cost in the income statement and allows only the service cost component of net benefit cost to be eligible for capitalization.

**Effective Date:** The amendments were effective for public business entities for fiscal years beginning after December 15, 2017. The Company adopted this Update on January 1, 2018, and it had no impact on the Company's consolidated financial position and results of operations because the Company's defined benefit plan is frozen; therefore, there is no service cost component to consider. The cost for other components related to the defined benefit plan are recorded in employee benefits expense on the consolidated statements of income.

#### ASU 2016-15, Classification of Certain Cash Receipts and Cash Payments

**Issued:** August 2016

**Summary:** ASU 2016-15 clarifies how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The amendments are intended to reduce diversity in practice.

**Effective Date:** The amendments were effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. The Company adopted this Update on January 1, 2018 and it did not have a material impact on the Company's consolidated financial position or results of operations.

#### ASU 2018-09, Codification Improvements

**Issued:** July 2018

**Summary:** ASU 2018-09 amendments represent changes to clarify, correct errors in, or make minor improvements to the Codification. The amendments make the Codification easier to understand and easier to apply by eliminating inconsistencies and providing clarifications. The amendments are not expected to have a notable effect on current accounting practice or create a significant administrative cost to most entities.

**Effective Date:** The transition and effective date guidance is based on the facts and circumstances of each amendment. Some of the amendments do not require transition guidance and will be effective upon issuance. However, many of the amendments do have transition guidance with effective dates for annual periods beginning after December 15, 2017, for public business entities. This Update did not have an impact on the Company's consolidated financial position or results of operations in regards to amended improvements to recently adopted standards and is not expected to have an impact upon the adoption of amended guidance not yet effective.

#### **Newly Issued, Not Yet Effective Standards**

ASU 2018-14, Compensation—Retirement Benefits—Defined Benefit Plans—General (Topic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans

**Issued:** August 2018

**Summary:** ASU 2018-14 modifies the disclosure requirements under ASC 715-20 for employers that sponsor defined benefit pension or other postretirement plans. Those modifications include the removal and addition of disclosure requirements as well as clarifying specific disclosure requirements.

Effective Date: The amendments are effective for public business entities for fiscal years ending after December 15, 2020. For all other entities, the amendments are effective for annual reporting periods ending after December 15, 2021. Early adoption is permitted. This Update will have no impact on the Company's consolidated financial position and results of operations because in August 2018, Juniata's Board of Directors resolved to terminate the Company's defined benefit retirement plan, The Juniata Valley Bank Retirement Plan, effective November 30, 2018. All participants have been properly notified and settlement of all obligations is expected to occur in mid-2019. See Note 11 for additional information.

ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement

**Issued:** August 2018

**Summary:** ASU 2018-13 modifies the disclosure requirements for fair value measurements required under ASC 820. Those modifications include the removal and addition of disclosure requirements as well as clarifying specific disclosure requirements.

**Effective Date:** The amendments become effective for all entities for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted upon issuance of this ASU. An entity is permitted to early adopt all disclosure requirements in the ASU or early adopt only the removed and modified disclosures and delay adoption of the additional disclosures until their effective date. This Update is not expected to have an impact on the Company's consolidated financial position or results of operations.

ASU 2016-02, Leases

**Issued:** February 2016

**Summary:** The new standard establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement.

In July 2018, the FASB issued *ASU-2018-10*, *Codification Improvements to Topic 842*, *Leases*. ASU 2018-10 clarifies the intended application of certain narrow aspects of the guidance in ASU 2016-02. The amendments are similar in nature to those in the FASB's ongoing project to make improvements to clarify the Codification or correct unintended application of the guidance. Key amendments in this ASU include:

- Updating the definition of Rate Implicit in the Lease to clarify that the rate cannot be less than zero;
- · Clarifying application of guidance for lessors when determining impairment of net investment in the lease; Clarifying whether lessors and lessees should recognize certain transition adjustments to earnings rather than through equity;
  - · Clarifying certain transition guidance for amounts previously recognized in business combinations.

In July 2018, the FASB also issued *ASU 2018-11*, *Leases (Topic 842): Targeted Improvements*. ASU 2018-11 provides entities with an additional (and optional) transition method to adopt the new leases standard. Under this new transition method, an entity initially applies the new leases standard at the adoption date and recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.

ASU 2018-11 also provides lessors with a practical expedient, by class of underlying asset, to elect not to separate nonlease components from the associated lease component and, instead, to account for those components as a single component if the nonlease components otherwise would be accounted for under the new revenue guidance (Topic 606) and both the timing and pattern of transfer of the nonlease component(s) and associated lease component are the same, and the lease component, if accounted for separately, would be classified as an operating lease. If the nonlease component or components associated with the lease component are the predominant component of the combined component, an entity is required to account for the combined component in accordance with Topic 606. Otherwise, the entity must account for the combined component as an operating lease in accordance with Topic 842.

**Effective Date:** ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. ASU 2018-10 becomes effective upon issuance for entities that early adopted Topic 842, and the transition requirements are the same as those in Topic 842. For entities that have not adopted Topic 842, the effective date and transition requirements are the same as the effective date and transition requirements in Topic 842. The effective date of the amendments in ASU 2018-11 related to the lessor practical expedient depends upon whether an entity has adopted the new leases standard as of the date of application of this ASU. The effective date of the amendments in ASU 2018-11 related to transition are the same as the effective date for ASU 2016-02.

The Company has determined that the provisions of ASU 2016-02 will result in an increase in assets to recognize the present value of the lease obligations with a corresponding increase in liabilities; however, the Company does not expect this new standard to have a material impact on the Company's results of operations or cash flows because the Company owns most of its facilities and this ASU will apply primarily to its four small operating leases. The Company is currently evaluating the appropriate transition method and projected present value of its leases at the adoption date.

ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities

**Issued:** August 2017

**Summary:** ASU 2017-12 improves Topic 815 by simplifying and expanding the eligible hedging strategies for financial and nonfinancial risks by more closely aligning hedge accounting with a company's risk management activities, and also simplifies its application through targeted improvements in key practice areas. This includes expanding the list of items eligible to be hedged and amending the methods used to measure the effectiveness of hedging relationships. In addition, the ASU prescribes how hedging results should be presented and requires incremental disclosures. These changes are intended to allow preparers more flexibility and to enhance the transparency of how hedging results are presented and disclosed. Further, the new standard provides partial relief on the timing of certain aspects of hedge documentation and eliminates the requirement to recognize hedge ineffectiveness separately in earnings in the current period.

**Effective Date:** The amendments are effective for public business entities, for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early application is permitted in any interim period after issuance of the amendments for existing hedging relationships on the date of adoption. This Update will have no impact on the Company's consolidated financial position and results of operations.

ASU 2017-04, Simplifying the Test for Goodwill Impairment

**Issued:** January 2017

**Summary:** ASU 2017-04 eliminates the requirement of Step 2 in the current guidance to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value in Step 1 of the current guidance.

**Effective Date:** The amendments are effective for public business entities for fiscal years beginning after December 15, 2019. The adoption of this Update is not expected to have an impact on the Company's consolidated financial position and results of operations.

ASU 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments

Issued: June 2016

**Summary:** ASU 2016-13 requires credit losses on most financial assets to be measured at amortized cost and certain other instruments to be measured using an expected credit loss model (referred to as the current expected credit loss ("CECL") model). Under this model, entities will estimate credit losses over the entire contractual term of the instrument (considering estimated prepayments, but not expected extensions or modifications unless reasonable expectation of a troubled debt restructuring exists) from the date of initial recognition of that instrument.

The ASU also replaces the current accounting model for purchased credit impaired loans and debt securities. The allowance for credit losses for purchased financial assets with a more-than insignificant amount of credit deterioration since origination ("PCD assets"), should be determined in a similar manner to other financial assets measured on an

amortized cost basis. However, upon initial recognition, the allowance for credit losses is added to the purchase price ("gross up approach") to determine the initial amortized cost basis. The subsequent accounting for PCD financial assets is the same expected loss model described above.

Further, the ASU made certain targeted amendments to the existing impairment model for available-for-sale (AFS) debt securities. For an AFS debt security for which there is neither the intent nor a more-likely-than-not requirement to sell, an entity will record credit losses as an allowance rather than a write-down of the amortized cost basis.

Effective Date: The new standard is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. While the Company's senior management is currently in the process of evaluating the impact of the amended guidance on its consolidated financial statements and disclosures, it currently expects the ALLL to increase upon adoption given that the allowance will be required to cover the full remaining expected life of the portfolio, rather than the incurred loss under current U.S. GAAP. The extent of this increase is still being evaluated and will depend on economic conditions and the composition of the Company's loan portfolio at the time of adoption. In preparation, the Company has partnered with a software provider specializing in ALLL analysis and is assessing the sufficiency of data currently available through its core database.

#### 3. MERGER

On April 30, 2018, the Company completed the acquisition of Liverpool Community Bank, a Pennsylvania state-chartered bank with one branch location in Liverpool, Perry County. Liverpool was merged with and into The Juniata Valley Bank. As of the merger date, Liverpool had assets of \$45,360,000, loans of \$32,091,000, and equity of \$9,246,000.

Prior to the acquisition, Juniata owned 1,214, or 39.16%, of the 3,100 outstanding common shares of Liverpool. The merger was accounted for using the acquisition method of accounting, in accordance with the provisions of ASC 805, Business Combinations. Juniata obtained control over Liverpool in a step acquisition by acquiring the previously unowned interest in Liverpool. As such, Juniata was required to remeasure its previously held equity interest in Liverpool at its acquisition date fair value and recognize the resulting gain in earnings. The purchase price for the step acquisition was calculated as the aggregate of the consideration transferred for the newly acquired interest (Step Two 60.84% interest) and the fair value of Juniata's previously held equity interest (Step One 39.16% interest) in Liverpool.

On April 30, 2018, Juniata's Step One adjusted basis in Liverpool was \$5,037,000, which included a \$415,000 equity gain from the acquisition, in addition to Juniata's basis in Liverpool of \$4,622,000 prior to the recording of the equity gain.

Liverpool shareholders (other than Juniata, whose Liverpool common stock owned of record or beneficially was cancelled) received either: (i) 202.6286 shares of common stock of Juniata or (ii) \$4,050.00 in cash in exchange for each share of Liverpool common stock subject to the limitation that cash would be paid for no more than 20% and no less than 15% of Liverpool's outstanding common stock. As a result, Juniata issued 315,284 shares of common stock with an acquisition date fair value of approximately \$6,463,000, based on Juniata's closing stock price of \$20.50 on April 30, 2018, and cash of \$1,362,000, including cash in lieu of fractional shares for a total Step Two purchase price consideration of \$7,825,000. The total purchase price of the merger, including both the Step One adjusted basis and Step Two purchase price consideration, was \$12,862,000.

The assets and liabilities of Liverpool were recorded on the consolidated balance sheet at their estimated fair value as of April 30, 2018, and its results of operations have been included in the consolidated income statement since such date.

The purchase price included goodwill and a core deposit intangible of \$3,691,000 and \$289,000, respectively. The core deposit intangible will be amortized over a ten-year period using a sum of the year's digits basis. The goodwill will not be amortized but will be tested annually for impairment, or more frequently if circumstances require.

# Allocation of the purchase price was as follows:

# (Dollars in thousands)

Step One Purchase Price Consideration		
April 30, 2018 JUVF basis in LCB (before gain)	\$4,622	
Increase in Step One basis from equity gain in acquisition	415	
Total Step One adjusted basis	5,037	
Step Two Purchase Price Consideration		
Purchase price assigned to LCB common shares exchanged for 315,284 JUVF common shares	\$6,463	
Purchase price assigned to LCB common shares exchanged for cash including cash in lieu of fractional	1 262	
shares	1,362	
Total Step Two purchase price consideration	7,825	
Total purchase price	12,862	
LCB net assets acquired:		
Tangible common equity	9,246	
Adjustments to reflect assets acquired and liabilities assumed at fair value:		
Total fair value adjustments	(95)	
Associated deferred income taxes	20	
Fair value adjustment to net assets acquired, net of tax	(75)	
Total LCB net assets acquired	9,171	
Goodwill resulting from the merger	\$3,691	

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed.

#### (Dollars in thousands)

Total purchase price	\$12,862
Net assets acquired:	
Cash and cash equivalents	8,923
Investments in time deposits with banks	3,675
Loans	31,331
Premises and equipment	125
Accrued interest receivable	123
Core deposit and other intangibles	289
Bank owned life insurance	632
FHLB stock	124
Other assets	267
Deposits	(36,052)
Accrued interest payable	(17)
Other liabilities	(249)
	9,171
Goodwill	\$3,691

As of April 30, 2018, the merger date, goodwill was recorded at \$3,691,000. ASC 805 allows for adjustments to the estimated fair value of assets and liabilities, and the resulting goodwill for a period of up to one year after the merger date for new information that becomes available that reflects circumstances at the merger date.

The fair value of the financial assets acquired included loans receivable with a gross amortized cost basis of \$32,091,000. The table below illustrates the fair value adjustments made to the amortized cost basis in order to present a fair value of the loans acquired.

#### (Dollars in thousands)

Gross amortized cost basis at April 30, 2018	\$32,091
Market rate adjustment	272
Credit fair value adjustment on pools of homogeneous loans	(496)
Credit fair value adjustment on purchased credit impaired loans	(622)
Reversal of existing deferred fees and premiums	86
Fair value of purchased loans at April 30, 2018	\$31,331

The market rate adjustment represents the movement in market interest rates, irrespective of credit adjustments, compared to the stated rates of the acquired loans. The credit adjustment made on pools of homogeneous loans represents the changes in credit quality of the underlying borrowers from the loan inception to the acquisition date. The credit adjustment on impaired loans is derived in accordance with ASC 310-30 and represents the portion of the loan balances that has been deemed uncollectible based on the Company's expectations of future cash flows for each respective loan.

Summarized below is the acquired Liverpool purchased credit impaired loan portfolio as of April 30, 2018.

#### (Dollars in thousands)

Contractually required principal and interest at acquisition	\$2,022
Contractual cash flows not expected to be collected (nonaccretable discount)	(1,273)
Expected cash flows at acquisition	749
Interest component of expected cash flows (accretable discount)	(177)
Fair value of acquired loans	\$572

The following table presents unaudited pro forma information as if the merger between Juniata and Liverpool had been completed on January 1, 2017. The proforma information does not necessarily reflect the results of operations that would have occurred had Juniata merged with Liverpool at the beginning of 2017. Due to Juniata's former 39.16% ownership in Liverpool, the income previously recorded in the nine months ended September 30, 2018 and the three and nine months ended September 30, 2017 that was attributable to the partial ownership of Liverpool has been excluded, in addition to merger-related costs incurred in 2018 and the resulting tax impacts. Supplemental pro forma earnings for the three months ended September 30, 2018 were adjusted to exclude \$185,000 in merger-related expenses and the resulting \$39,000 tax benefit. Supplemental pro forma earnings for the nine months ended September 30, 2018 were adjusted to exclude \$296,000 from the income/gain from unconsolidated subsidiary, \$625,000 in merger-related expenses, and the resulting tax benefit of \$69,000. The results for the comparable 2017 periods were adjusted to include the aforementioned merger-related expenses; however, those results exclude the income from unconsolidated subsidiary previously recorded in the three and nine months ended September 30, 2017 of \$49,000 and \$154,000, respectively. The resulting tax benefits included in the three and nine months ended September 30, 2017 were \$49,000 and \$163,000, respectively. A 21% tax rate was assumed in both the 2018 and 2017 periods. The pro forma financial information does not include the impact of possible business model changes, nor does it consider any potential impacts of current market conditions or revenues, expense efficiencies or other factors.

(Dollars in thousands; except share data)	(Unaudited) Three Months 30,	ended September	(Unaudited) Nine Months ended September 30,			
	2018	2017	2018	2017		
Net interest income after loan loss provision	\$ 5,147	\$ 5,027	\$ 15,596	\$ 14,930		
Noninterest income	1,241	1,216	3,701	4,068		
Noninterest expense	4,847	4,737	13,959	13,916		
Net income available to common shareholders	1,531	1,428	5,179	5,176		
Net income per common share	0.30	0.28	1.01	1.02		

#### 4. Accumulated other Comprehensive loss

Components of accumulated other comprehensive loss, net of tax, consisted of the following:

#### (Dollars in thousands)

		ptember 30, 2018	Ι	December 31, 2017		
Unrealized losses on available for sale securities	\$	(4,461	) \$	6 (1,683	)	
Unrecognized expense for defined benefit pension		(1,341	)	(2,351	)	
Accumulated other comprehensive loss	\$	(5,802	) \$	6 (4,034	)	

#### **5.** Earnings Per Share

Basic earnings per share ("EPS") is computed by dividing net income by the weighted average number of common shares outstanding for the period. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the Company. Potential common shares that may be issued by the Company relate solely to outstanding stock options and are determined using the treasury stock method.

The following table sets forth the computation of basic and diluted earnings per share:

(Dollars in thousands, except earnings per share data)	Three Months Ended September 30			September 30,
	20	018	20	17
Net income	\$	1,385	\$	1,206
Weighted-average common shares outstanding		5,094		4,768
Basic earnings per share	\$	0.27	\$	0.25
Weighted-average common shares outstanding		5.094		4,768
Common stock equivalents due to effect of stock options		26		11
Total weighted-average common shares and equivalents		5,120		4,779
Diluted earnings per share	\$	0.27	\$	0.25

	N	Nine Months Ended September 30		
	2018		20	017
Net income	\$	4,281	\$	3,959
Weighted-average common shares outstanding		4,952		4,764
Basic earnings per share	\$	0.86	\$	0.83
Weighted-average common shares outstanding		4,952		4,764
Common stock equivalents due to effect of stock options		21		9
Total weighted-average common shares and equivalents		4,973		4,773
Diluted earnings per share	\$	0.86	\$	0.83

#### 6. Securities

On January 1, 2018, the Company adopted ASU 2016-01, Measurement of Financial Assets Instruments. Upon adoption, equity securities with readily determinable fair values are stated at fair value with realized and unrealized gains and losses reported in net income. For periods prior to January 1, 2018, equity securities were classified as available for sale and stated at fair value with unrealized gains and losses reported as a separate component of AOCI, net of tax. At December 31, 2017, the fair value of equity securities classified as available for sale was \$1,119,000. The adoption of ASU 2016-01 resulted in a reclassification of \$156,000 in net unrealized gains from AOCI to retained earnings. As of September 30, 2018, the Company had \$1,162,000 in equity investments recorded at fair value.

The Company's available for sale investment portfolio includes primarily bonds issued by U.S. Government sponsored agencies (approximately 24% of the investment portfolio), mortgage-backed securities issued by Government-sponsored agencies and backed by residential mortgages (approximately 62%) and municipal bonds (approximately 14%) as of September 30, 2018. Most of the municipal bonds are general obligation bonds with maturities or pre-refunding dates within 5 years.

The amortized cost and fair value of securities available for sale as of September 30, 2018 and December 31, 2017, by contractual maturity, are shown below. Expected maturities may differ from contractual maturities because the securities may be called or prepaid with or without prepayment penalties.

	September 30, 2018	
(Dollars in thousands)	Gross	Gross
	Amortized Fair Unrealized	Unrealized
	Cost Value Gains	Losses

#### **Securities Available for Sale**

Type and Maturity

Obligations of U.S. Government agencies and corporations

Within one year	\$6,000	\$5,997	\$ -	\$ (3	)
After one year but within five years	24,997	23,916	-	(1,081	)
After five years but within ten years	3,999	3,789	-	(210	)
	34,996	33,702	-	(1,294	)
Obligations of state and political subdivisions					
Within one year	1,053	1,051	-	(2	)
After one year but within five years	14,250	14,016	6	(240	)
After five years but within ten years	4,648	4,448	2	(202	)
	19,951	19,515	8	(444	)
Mortgage-backed securities	89,357	85,433	-	(3,924	)
Total securities available for sale	\$144,304	\$138,650	\$ 8	\$ (5,662	)

	December 31, 2017				
(Dollars in thousands)	Amortized Fair Cost Value		Gross	Gross Unrealized Losses	
			Unrealized		
			Gains		
Securities Available for Sale					
Type and Maturity					
Obligations of U.S. Government agencies and corporations					
Within one year	\$6,000	\$5,969	\$ -	\$ (31	)
After one year but within five years	15,000	14,689	-	(311	)
After five years but within ten years	13,998	13,556	-	(442	)
	34,998	34,214	-	(784	)
Obligations of state and political subdivisions					
Within one year	2,521	2,516	-	(5	)
After one year but within five years	13,959	13,955	50	(54	)
After five years but within ten years	8,611	8,510	18	(119	)
	25,091	24,981	68	(178	)
Mortgage-backed securities	94,945	93,510	38	(1,473	)
Equity securities	922	1,119	197	-	
Total	\$155,956	\$153,824	\$ 303	\$ (2,435	)

Certain obligations of the U.S. Government and state and political subdivisions are pledged to secure public deposits, securities sold under agreements to repurchase and for other purposes as required or permitted by law. The carrying value of the pledged assets was \$57,618,000 and \$47,825,000 at September 30, 2018 and December 31, 2017, respectively.

In addition to cash received from the scheduled maturities of securities, some investment securities available for sale are sold or called at current market values during the course of normal operations.

The following table summarizes proceeds received from sales or calls of available for sale investment securities transactions and the resulting realized gains and losses.

	Three Months Ended	Nine Months Ended	
(Dollars in thousands)	September 30,	September 30,	
	20182017	2018 2017	
Gross proceeds from sales and calls of securities	\$ - \$10,166	\$4,285 \$21,800	
Securities available for sale:			
Gross realized gains from sold and called securities	\$ - \$30	\$- \$539	

Gross realized losses from sold and called securities	-	(28	) (15	) (32	)
Gross gains from business combinations	-	-	-	3	
Net (losses) gains	\$ -	\$2	\$(15	) \$510	

As of January 1, 2018, upon the adoption of ASU 2016-01, all of the Company' equity securities are within the scope of ASC Topic 321, Investments – Equity Securities. ASC 321 requires all equity investments within its scope to be measured at fair value with changes in fair value recognized in net income. The Company recorded a decline of \$4,000 during the three months ended September 30, 2018 and an increase of \$42,000 during the nine months ended September 30, 2018 for the change in fair value of equity securities on the consolidated statements of income.

ASC Topic 320, Investments – Debt and Equity Securities, clarifies the interaction of the factors that should be considered when determining whether a debt security is other-than-temporarily impaired. Management must assess whether (a) it has the intent to sell the security and (b) it is more likely than not that it will be required to sell the security prior to its anticipated recovery. These steps are taken before an assessment is made as to whether the entity will recover the cost basis of the investment. In instances when a determination is made that an other-than-temporary impairment exists and the entity does not intend to sell the debt security and it is not more likely than not that it will be required to sell the debt security prior to its anticipated recovery, the other-than-temporary impairment is separated into the amount of the total other-than-temporary impairment related to a decrease in cash flows expected to be collected from the debt security (the credit loss) and the amount of the total other-than-temporary impairment related to the credit loss is recognized in earnings. The amount of the total other-than-temporary impairment related to all other factors is recognized in other comprehensive income (loss).

The following tables show gross unrealized losses and fair values of securities available for sale, aggregated by category and length of time the individual securities have been in a continuous unrealized loss position, at September 30, 2018 and December 31, 2017:

							r 30, 2018						
		Than 12 l						Tota					
	Num					Nun				Nun			
(Dollars in thousands)	of	Fair	Un	realiz			Fair	Unrealize	ed		Fair	Unrealiz	ed
	Secu	r <b>V</b> iadrae	Lo	sses		Secu	n <b>Viidu</b> e	Losses		Secu	ır <b>Madu</b> e	Losses	
Obligations of U.S. Government agencies and corporations	-	\$-	\$ -			20	\$33,702	\$ (1,294	)	20	\$33,702	\$ (1,294	)
Obligations of state and political subdivisions	21	10,804	(	[121	)	8	6,208	(323	)	29	17,012	(444	)
Mortgage-backed securities	9	19,484	(	609	)	37	65,949	(3,315	)	46	85,433	(3,924	)
Total temporarily impaired securities	30	\$30,288	\$ (	730	)	65	\$105,859	\$ (4,932	)	95	\$136,147	\$ (5,662	)
	Unı	ealized L	osse	s at D	ec	embe	er 31, 2017						
		s Than 12			-		Months or 1	More		Tota	1		
		nber	1,10	111115			mber			Nun			
(Dollars in thousands)	of	Fair	U	nreali	ze		Fair	Unrealize	ed		Fair	Unrealiz	ed
	Sec	ur <b>Madu</b> e	L	osses		Sec	ur <b>Madu</b> e	Losses		Secu	ır <b>Mi<del>d</del>u</b> e	Losses	
Obligations of U.S. Government agencies and corporations	5	\$10,845	\$	(157	)	15	\$23,369	\$ (627	)	20	\$34,214	\$ (784	)
Obligations of state and political subdivisions	23	10,491		(70	)	6	3,862	(108	)	29	14,353	(178	)
Mortgage-backed securities	23	51,050		(518	)	20	38,740	(955	)	43	89,790	(1,473	)
Total debt securities	51	72,386		(745	)	41	65,971	(1,690	)	92	138,357	(2,435	)
Equity securities	1	9		-		1	4	-		2	13	-	
Total temporarily impaired securities	52	\$72,395	\$	(745	)	42	\$65,975	\$ (1,690	)	94	\$138,370	\$ (2,435	)

At September 30, 2018, 20 U.S. Government agency and corporation securities had unrealized losses that, in the aggregate, did not exceed 1.0% of the amortized cost of the securities portfolio. All of these securities have been in a continuous loss position for 12 months or more.

At September 30, 2018, 29 obligations of state and political subdivisions had unrealized losses that, in the aggregate, did not exceed 1.0% of the amortized cost of the securities portfolio. Eight of these securities has been in a continuous loss position for 12 months or more.

At September 30, 2018, 46 mortgage-backed securities had an unrealized loss that did not exceed 3.0% of the amortized cost of the securities portfolio. Thirty-seven of these securities has been in a continuous loss position for 12 months or more. The mortgage-backed securities in the Company's portfolio are government sponsored enterprise (GSE) pass-through instruments issued by the Federal National Mortgage Association (FNMA) or Federal Home Loan Mortgage Corporation (FHLMC), which guarantees the timely payment of principal on these investments.

The unrealized losses noted above are considered to be temporary impairments. The decline in the values of the debt securities is due only to interest rate fluctuations, rather than erosion of issuer credit quality. As a result, the payment of contractual cash flows, including principal repayment, is not at risk. Because the Company does not intend to sell the securities, does not believe the Company will be required to sell the securities before recovery and expects to recover the entire amortized cost basis, none of the debt securities are deemed to be other-than-temporarily impaired for the periods ended, September 30, 2018, September 30, 2017 and December 31, 2017, respectively.

Equity securities owned by the Company consist of common stock of various financial services providers. Management identified no other-than-temporary impairment as of, or for the periods ended December 31, 2017 and September 30, 2017.

#### 7. Loans and Related Allowance for Credit Losses

Loans that the Company originated and has the intent and ability to hold for the foreseeable future or until maturity or payoff are stated at the outstanding unpaid principal balances, net of any deferred fees or costs and the allowance for loan losses. Loans acquired through a business combination are discussed under the heading "Acquired Loans". Interest income on all loans, other than nonaccrual loans, is accrued over the term of the loans based on the amount of principal outstanding. Unearned income is amortized to income over the life of the loans, using the interest method.

The loan portfolio is segmented into commercial and consumer loans. Commercial loans are comprised of the following classes of loans: (1) commercial, financial and agricultural, (2) commercial real estate, (3) real estate construction, a portion of (4) mortgage loans and (5) obligations of states and political subdivisions. Consumer loans are comprised of a portion of (4) mortgage loans and (6) personal loans.

Loans on which the accrual of interest has been discontinued are designated as non-accrual loans. Accrual of interest on loans is generally discontinued when the contractual payment of principal or interest has become 90 days past due or reasonable doubt exists as to the full, timely collection of principal or interest. However, it is the Company's policy to continue to accrue interest on loans over 90 days past due as long as (1) they are guaranteed or well secured and (2) there is an effective means of timely collection in process. When a loan is placed on non-accrual status, all unpaid interest credited to income in the current year is reversed against current period income, and unpaid interest accrued in prior years is charged against the allowance for loan losses. Interest received on nonaccrual loans generally is either applied against principal or reported as interest income, according to management's judgment as to the collectability of principal. Generally, accruals are resumed on loans only when the obligation is brought fully current with respect to interest and principal, has performed in accordance with the contractual terms for a reasonable period of time and the ultimate collectability of the total contractual principal and interest is no longer in doubt.

The Company originates loans in the portfolio with the intent to hold them until maturity. At the time the Company no longer intends to hold loans to maturity based on asset/liability management practices, the Company transfers loans from its portfolio to held for sale at fair value. Any write-down recorded upon transfer is charged against the allowance for loan losses. Any write-downs recorded after the initial transfers are recorded as a charge to other non-interest expense. Gains or losses recognized upon sale are included in gains on sales of loans which is a component of non-interest income.

Loans Held for Sale

The Company has originated residential mortgage loans with the intent to sell. These individual loans are normally funded by the buyer immediately. The Company maintains servicing rights on these loans. Mortgage servicing rights are recognized as an asset upon the sale of a mortgage loan. A portion of the cost of the loan is allocated to the servicing right based upon relative fair value. Servicing rights are intangible assets and are carried at estimated fair value. Adjustments to fair value are recorded as non-interest income and included in mortgage banking income in the consolidated statements of income.

In a business combination, the Company may acquire loans which it intends to sell. These loans are assigned a fair value by obtaining actual bids on the loans and adjusting for contingencies in the bids. These loans are carried at lower of cost or market value until sold, adjusted periodically if conditions change before the subsequent sale. Adjustments to fair value and gains or losses recognized upon sale are included in gains on sales of loans which is a component of non-interest income.

Commercial, Financial and Agricultural Lending

The Company originates commercial, financial and agricultural loans primarily to businesses located in its primary market area and surrounding areas. These loans are used for various business purposes, which include short-term loans and lines of credit to finance machinery and equipment purchases, inventory and accounts receivable. Generally, the maximum term for loans extended on machinery and equipment is shorter and does not exceed the projected useful life of such machinery and equipment. Most business lines of credit are written with a five year maturity, subject to an annual credit review.

Commercial loans are generally secured with short-term assets; however, in many cases, additional collateral, such as real estate, is provided as additional security for the loan. Loan-to-value maximum values have been established by the Company and are specific to the type of collateral. Collateral values may be determined using invoices, inventory reports, accounts receivable aging reports, collateral appraisals, and other methods.

In underwriting commercial loans, an analysis of the borrower's character, capacity to repay the loan, the adequacy of the borrower's capital and collateral, as well as an evaluation of conditions affecting the borrower, is performed. Analysis of the borrower's past, present and future cash flows is also an important aspect of the Company's analysis.

Concentration analysis assists in identifying industry specific risk inherent in commercial, financial and agricultural lending. Mitigants include the identification of secondary and tertiary sources of repayment and appropriate increases in oversight.

Commercial, financial and agricultural loans generally present a higher level of risk than certain other types of loans, particularly during slow economic conditions.

### Commercial Real Estate Lending

The Company engages in commercial real estate lending in its primary market area and surrounding areas. The Company's commercial real estate portfolio is secured primarily by residential housing, commercial buildings, raw land and hotels. Generally, commercial real estate loans have terms that do not exceed 20 years, have loan-to-value ratios of up to 80% of the appraised value of the property and are typically secured by personal guarantees of the borrowers.

As economic conditions deteriorate, the Company reduces its exposure in real estate loans with higher risk characteristics. In underwriting these loans, the Company performs a thorough analysis of the financial condition of the borrower, the borrower's credit history, and the reliability and predictability of the cash flow generated by the property securing the loan. Appraisals on properties securing commercial real estate loans originated by the Company are performed by independent appraisers.

Commercial real estate loans generally present a higher level of risk than certain other types of loans, particularly during slow economic conditions.

Real Estate Construction Lending

The Company engages in real estate construction lending in its primary market area and surrounding areas. The Company's real estate construction lending consists of commercial and residential site development loans, as well as commercial building construction and residential housing construction loans.

The Company's commercial real estate construction loans are generally secured with the subject property, and advances are made in conformity with a pre-determined draw schedule supported by independent inspections. Terms of construction loans depend on the specifics of the project, such as estimated absorption rates, estimated time to complete, etc.

In underwriting commercial real estate construction loans, the Company performs a thorough analysis of the financial condition of the borrower, the borrower's credit history, the reliability and predictability of the cash flow generated by the project using feasibility studies, market data, and other resources. Appraisals on properties securing commercial real estate loans originated by the Company are performed by independent appraisers.

Real estate construction loans generally present a higher level of risk than certain other types of loans, particularly during slow economic conditions. The difficulty of estimating total construction costs adds to the risk as well.

Mortgage Lending

The Company's real estate mortgage portfolio is comprised of consumer residential mortgages and business loans secured by one-to-four family properties. One-to-four family residential mortgage loan originations, including home equity installment and home equity lines of credit loans, are generated by the Company's marketing efforts, its present customers, walk-in customers and referrals. These loans originate primarily within the Company's market area or with customers primarily from the market area.

The Company offers fixed-rate and adjustable rate mortgage loans with terms up to a maximum of 25-years for both permanent structures and those under construction. The Company's one-to-four family residential mortgage originations are secured primarily by properties located in its primary market area and surrounding areas. The majority of the Company's residential mortgage loans originate with a loan-to-value of 80% or less. Home equity installment loans are secured by the borrower's primary residence with a maximum loan-to-value of 95% and a maximum term of 15 years. Home equity lines of credit are secured by the borrower's primary residence with a maximum loan-to-value of 90% and a maximum term of 20 years.

In underwriting one-to-four family residential real estate loans, the Company evaluates the borrower's ability to make monthly payments, the borrower's repayment history and the value of the property securing the loan. The ability to repay is determined by the borrower's employment history, current financial conditions, and credit background. The analysis is based primarily on the customer's ability to repay and secondarily on the collateral or security. Most properties securing real estate loans made by the Company are appraised by independent fee appraisers. The Company generally requires mortgage loan borrowers to obtain an attorney's title opinion or title insurance, and fire and property insurance (including flood insurance, if necessary) in an amount not less than the amount of the loan. The Company does not engage in sub-prime residential mortgage originations.

Residential mortgage loans and home equity loans generally present a lower level of risk than certain other types of consumer loans because they are secured by the borrower's primary residence. Risk is increased when the Company is in a subordinate position for the loan collateral.

Obligations of States and Political Subdivisions

The Company lends to local municipalities and other tax-exempt organizations. These loans are primarily tax-anticipation notes and, as such, carry little risk. Historically, the Company has never had a loss on any loan of this type.

Personal Lending

The Company offers a variety of secured and unsecured personal loans, including vehicle loans, mobile home loans and loans secured by savings deposits as well as other types of personal loans.

Personal loan terms vary according to the type and value of collateral and creditworthiness of the borrower. In underwriting personal loans, a thorough analysis of the borrower's willingness and financial ability to repay the loan as agreed is performed. The ability to repay is determined by the borrower's employment history, current financial conditions and credit background.

Personal loans may entail greater credit risk than do residential mortgage loans, particularly in the case of personal loans which are unsecured or are secured by rapidly depreciable assets, such as automobiles or recreational equipment. In such cases, any repossessed collateral for a defaulted personal loan may not provide an adequate source of repayment of the outstanding loan balance as a result of the greater likelihood of damage, loss or depreciation. In addition, personal loan collections are dependent on the borrower's continuing financial stability, and thus are more likely to be affected by adverse personal circumstances. Furthermore, the application of various federal and state laws, including bankruptcy and insolvency laws, may limit the amount which can be recovered on such loans.

Allowance for Credit Losses

The allowance for credit losses consists of the allowance for loan losses and the reserve for unfunded lending commitments. The allowance for loan losses ("allowance") represents management's estimate of losses inherent in the loan portfolio as of the consolidated statement of financial condition date and is recorded as a reduction to loans. The reserve for unfunded lending commitments represents management's estimate of losses inherent in its unfunded lending commitments and is recorded in other liabilities on the consolidated statement of financial condition, when necessary. The amount of the reserve for unfunded lending commitments is not material to the consolidated financial statements. The allowance for loan losses is increased by the provision for loan losses, and decreased by charge-offs, net of recoveries. Loans deemed to be uncollectible are charged against the allowance for loan losses, and subsequent recoveries, if any, are credited to the allowance.

For financial reporting purposes, the provision for loan losses charged to current operating income is based on management's estimates, and actual losses may vary from estimates. These estimates are reviewed and adjusted at least quarterly and are reported in earnings in the periods in which they become known.

Loans included in any class are considered for charge-off when:

principal or interest has been in default for 120 days or more and for which no payment has been received during the previous four months;

all collateral securing the loan has been liquidated and a deficiency balance remains;
a bankruptcy notice is received for an unsecured loan;
a confirming loss event has occurred; or
the loan is deemed to be uncollectible for any other reason.

The allowance for loan losses is maintained at a level considered adequate to offset probable losses on the Company's existing loans. The analysis of the allowance for loan losses relies heavily on changes in observable trends that may indicate potential credit weaknesses. Management's periodic evaluation of the adequacy of the allowance is based on the Company's past loan loss experience, known and inherent risks in the portfolio, adverse situations that may affect a borrower's ability to repay, the estimated value of any underlying collateral, composition of the loan portfolio, current economic conditions and other relevant factors. This evaluation is inherently subjective as it requires material estimates that may be susceptible to significant revision as more information becomes available.

In addition, regulatory agencies, as an integral part of their examination process, periodically review the Company's allowance for loan losses and may require the Company to recognize additions to the allowance for loan losses based on their judgments about information available to them at the time of their examination, which may not be currently available to management. Based on management's comprehensive analysis of the loan portfolio, management believes the level of the allowance for loan losses as of September 30, 2018 was adequate.

There are two components of the allowance: a specific component for loans that are deemed to be impaired and a general component for contingencies.

A loan is considered to be impaired when, based on current information and events, it is probable that the Company will be unable to collect the scheduled payments of principal or interest when due according to the contractual terms of the loan agreement. Factors considered by management in determining impairment include payment status, collateral value and the probability of collecting scheduled principal and interest payments when due. Loans that experience insignificant payment delays and payment shortfalls generally are not classified as impaired. Management determines the significance of payment delays and payment shortfalls on a case-by-case basis, taking into consideration all of the circumstances surrounding the loans and the borrower, including the length of the delay, the reasons for the delay, the borrower's prior payment record and the amount of the shortfall in relation to the principal and interest owed. Impairment is measured on a loan by loan basis by the present value of expected future cash flows discounted at the loan's effective interest rate, the loan's observable market price or the fair value of the collateral if the loan is collateral dependent.

The estimated fair values of substantially all of the Company's impaired loans are measured based on the estimated fair value of the loan's collateral. For commercial loans secured with real estate, estimated fair values are determined primarily through third-party appraisals. When a real estate secured loan becomes impaired, a decision is made regarding whether an updated certified appraisal of the real estate is necessary. This decision is based on various considerations, including the age of the most recent appraisal, the loan-to-value ratio based on the current appraisal and the condition of the property. Appraised values may be discounted to arrive at the estimated selling price of the collateral, which is considered to be the estimated fair value. The discounts also include the estimated costs to sell the property. For commercial loans secured by non-real estate collateral, estimated fair values are determined based on the borrower's financial statements, inventory reports, aging accounts receivable, equipment appraisals or invoices. Indications of value from these sources are generally discounted based on the age of the financial information or the quality of the assets. For such loans that are classified as impaired, an allowance is established when the discounted cash flows (or collateral value or observable market price) of the impaired loan is lower than the carrying value of that loan. The Company generally does not separately identify individual consumer segment loans for impairment disclosures unless such loans are subject to a restructuring agreement.

Loans whose terms are modified are classified as troubled debt restructurings if the Company grants borrowers' concessions and it is deemed that those borrowers are experiencing financial difficulty. Concessions granted under a troubled debt restructuring generally involve a below-market interest rate based on the loan's risk characteristics or an extension of a loan's stated maturity date. Nonaccrual troubled debt restructurings are restored to accrual status if principal and interest payments, under the modified terms, are current for a sustained period of time after modification. Loans classified as troubled debt restructurings are designated as impaired.

The component of the allowance for contingencies relates to other loans that have been segmented into risk rated categories. The borrower's overall financial condition, repayment sources, guarantors and value of collateral, if appropriate, are evaluated quarterly or when credit deficiencies arise, such as delinquent loan payments. Credit quality risk ratings include regulatory classifications of special mention, substandard, doubtful and loss.

In the second quarter of 2018, management expanded the Company's internal credit quality risk ratings to include a pass/watch rating for loans whose performance may exhibit characteristics or conditions that could result in a downgrade to special mention in the future. The pass/watch rated loans are now reported within the pass rating classification. Prior to the risk rating expansion, all watch and special mention rated loans were classified as special mention.

Loans classified as special mention have potential weaknesses that deserve management's close attention. If uncorrected, the potential weaknesses may result in deterioration of the repayment prospects at a future date.

Loans classified as substandard have one or more well-defined weaknesses that jeopardize the liquidation of the debt and are characterized by the distinct possibility that the bank will sustain some loss if the deficiencies are not corrected. Substandard loans include loans that are inadequately protected by the current net worth and paying capacity of the obligor or of the collateral pledged, if any.

Loans classified doubtful have all the weaknesses inherent in loans classified substandard with the added characteristic that collection or liquidation in full, on the basis of current conditions and facts, is highly improbable.

Loans classified as a loss are considered uncollectible and are charged to the allowance for loan losses.

Specific reserves may be established for larger, individual classified loans as a result of this evaluation, as discussed above. Remaining loans not classified are rated pass and are categorized into large groups of smaller balance homogeneous loans and are collectively evaluated for impairment. This computation is generally based on historical loss experience adjusted for qualitative factors. During 2017, the historical loss experience look-back period was changed from ten years to five years in conjunction with an increase in the number of homogeneous loan groups. Increasing the number of portfolio segments allows for a more granular approach to the analysis, and historical loss experience is more specific to the selected loan types. Management believes that evaluating a look-back period longer than five years is no longer appropriate since more recent information is generally considered to be the most relevant. As indicated above, the historical loss experience is averaged over a five-year look-back period for each of the defined portfolio segments. The qualitative risk factors are reviewed for relevancy each quarter and include:

National, regional and local economic and business conditions, as well as the condition of various market segments, including the underlying collateral for collateral dependent loans;

- · Nature and volume of the portfolio and terms of loans;
- Experience, ability and depth of lending and credit management staff;
- · Volume and severity of past due, classified and nonaccrual loans, as well as other loan modifications;
- Existence and effect of any concentrations of credit and changes in the level of such concentrations;
  - Effect of external factors, including competition, legal and regulatory requirements; and

· Risk from change in the historical look-back period.

Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. Adjustments to the factors are supported through documentation of changes in conditions in a narrative accompanying the allowance for loan loss calculation.

Acquired Loans

Loans that Juniata acquires through business combinations are recorded at fair value with no carryover of the related allowance for loan losses. Fair value of the loans involves estimating the amount and timing of principal and interest cash flows expected to be collected on the loans and discounting those cash flows at a market rate of interest.

The excess of cash flows expected at acquisition over the estimated fair value is referred to as the accretable discount and is recognized into interest income over the remaining life of the loan. The difference between contractually required payments at acquisition and the cash flows expected to be collected at acquisition is referred to as the nonaccretable discount. The nonaccretable discount includes estimated future credit losses expected to be incurred over the life of the loan. Subsequent decreases to the expected cash flows will require Juniata to evaluate the need for an additional allowance for credit losses. Subsequent improvement in expected cash flows will result in the reversal of a corresponding amount of the nonaccretable discount which Juniata will then reclassify as accretable discount that will be recognized into interest income over the remaining life of the loan.

Acquired loans that met the criteria for impaired or nonaccrual of interest prior to the acquisition may be considered performing upon acquisition, regardless of whether the customer is contractually delinquent if Juniata expects to fully collect the new carrying value (i.e. fair value) of the loans. As such, Juniata may no longer consider the loan to be nonaccrual or nonperforming and may accrue interest on these loans, including the impact of any accretable discount. In addition, charge-offs on such loans would be first applied to the nonaccretable difference portion of the fair value adjustment.

Loans acquired through business combinations that do not meet the specific criteria of ASC 310-30, but for which a discount is attributable at least in part to credit quality, are also accounted for in accordance with this guidance. As a result, related discounts are recognized subsequently through accretion based on the contractual cash flows of the acquired loans.

### Loan Portfolio Classification

The following tables present the classes of the loan portfolio summarized by the aggregate pass rating and the classified ratings of special mention, substandard and doubtful within the Company's internal risk rating system as of September 30, 2018 and December 31, 2017. Due to the expansion of the Company's internal credit quality risk ratings in the second quarter of 2018, the amount reclassified from the special mention rating to the pass/watch rating, which is included within the pass rating classification below, was \$32,603,000 at June 30, 2018. Previously, both special mention and watch rated loans were reported under the special mention rating classification.

(Dollars in thousands)		Special			
	Pass	Mention	Substandard	Doubtful	Total
As of September 30, 2018					
Commercial, financial and agricultural	\$46,092	\$3,023	\$ 607	\$ -	\$49,722
Real estate - commercial	124,341	3,754	6,657	895	135,647
Real estate - construction	34,279	-	2,671	-	36,950
Real estate - mortgage	163,505	_	3,369	324	167,198

Obligations of states and political subdivisions	17,755	-	-	-	17,755
Personal	10,783	-	20	-	10,803
Total	\$396,755	\$ 6,777	\$ 13,324	\$ 1,219	\$418,075
(Dollars in thousands)		Special			
	Pass	Mention	Substandard	Doubtful	Total
As of December 31, 2017					
Commercial, financial and agricultural	\$34,826	\$8,692	\$ 2,280	\$ 4	\$45,802
Real estate - commercial	114,299	17,928	7,189	953	140,369
Real estate - construction	22,470	3,297	2,636	-	28,403
Real estate - mortgage	139,861	3,551	2,859	617	146,888
Obligations of states and political subdivisions	12,088	956	-	-	13,044
Personal	9,360	32	6	-	9,398
Total	\$332,904	\$34,456	\$ 14,970	\$ 1,574	\$383,904

The Company has certain loans in its portfolio that are considered to be impaired. It is the policy of the Company to recognize income on impaired loans that have been transferred to nonaccrual status on a cash basis, only to the extent that it exceeds principal balance recovery. Until an impaired loan is placed on nonaccrual status, income is recognized on the accrual basis. Collateral analysis is performed on each impaired loan at least quarterly, and results are used to determine if a specific reserve is necessary to adjust the carrying value of each individual loan down to the estimated fair value. Generally, specific reserves are carried against impaired loans based upon estimated collateral value until a confirming loss event occurs or until termination of the credit is scheduled through liquidation of the collateral or foreclosure. Charge off will occur when a confirmed loss is identified. Professional appraisals of collateral, discounted for expected selling costs, appraisal age, economic conditions and other known factors are used to determine the charge-off amount.

The following table summarizes information regarding impaired loans by portfolio class as of September 30, 2018 and December 31, 2017.

	As of So	eptember 3 Unpaid	0, 20	018	As of D	1, 20	2017	
(Dollars in thousands)	Recorde	edPrincipal	Rel	ated	Recorde	Unpaid edPrincipal	Related	
	Investm	e <b>B</b> talance	All	owance	Investm	e <b>B</b> talance	Allowance	
Impaired loans								
With no related allowance recorded:								
Commercial, financial and agricultural	\$-	\$6	\$	-	\$468	\$477	\$	-
Real estate - commercial	910	1,303		-	5,031	5,957		-
Acquired with credit deterioration	509	548		-	191	247		-
Real estate - mortgage	2,011	3,752		-	2,232	3,738		-
Acquired with credit deterioration	1,059	1,129		-	337	384		-
Personal	17	17		-	-	-		-
Total:								
Commercial, financial and agricultural	\$-	\$6	\$	-	\$468	\$477	\$	-
Real estate - commercial	910	1,303		-	5,031	5,957		-
Acquired with credit deterioration	509	548		-	191	247		-
Real estate - mortgage	2,011	3,752		_	2,232	3,738		_
Acquired with credit deterioration	1,059	1,129		-	337	384		-
Personal	17	17		-	-	-		-
	\$4,506	\$ 6,755	\$	-	\$8,259	\$10,803	\$	-

Average recorded investment of impaired loans and related interest income recognized for the three and nine months ended September 30, 2018 and 2017 are summarized in the tables below.

(Dollars in thousands) Impaired loans	Average Interest			Three Months Ended September 30, 2017 Average Interest Recorded ncome InvestmeRecognized				ash asis aerest come	
With no related allowance recorded: Commercial, financial and agricultural Real estate - commercial Acquired with credit deterioration Real estate - mortgage Acquired with credit deterioration Personal	\$- 912 521 1,990 1,095 17	\$	- - - 4 -	\$ - - 14 -	\$351 5,336 204 2,795 347	\$	5 81 - 5 -	\$	- - - 6 -
With an allowance recorded: Commercial, financial and agricultural Real estate - commercial	\$- -	\$	-	\$ - -	\$8 460	\$	- -	\$	-
Total: Commercial, financial and agricultural Real estate - commercial Acquired with credit deterioration Real estate - mortgage Acquired with credit deterioration Personal	\$- 912 521 1,990 1,095 17 \$4,535	\$	- - - 4 - - 4	\$ - - 14 - - \$ 14	\$359 5,796 204 2,795 347 - \$9,501	\$	5 81 - 5 - - 91	\$	- - 6 - -
(Dollars in thousands) Impaired loans	Nine M Septemb Average Recorde Investm	ber 3 e Inte	60, 2018 erest		Septemb Average Recorde	ber 3 e In ed In	iterest	B Ii	Cash Basis Interest Income
With no related allowance recorded: Commercial, financial and agricultural Real estate - commercial Acquired with credit deterioration Real estate - construction	\$234 2,971 350	\$	- - -	\$ - - -	\$396 5,671 420 1,228	\$	18 238 - 34	\$	- - -

Real estate - mortgage Acquired with credit deterioration Personal	2,122 698 9	14 - -	16 - -	2,933 379 -	16 - -	19 - -
With an allowance recorded:						
Real estate - mortgage	\$-	\$ -	\$ -	\$356	\$ -	\$ -
Total:						
Commercial, financial and agricultural	\$234	\$ -	\$ -	\$396	\$ 18	\$ -
Real estate - commercial	2,971	-	-	5,671	238	-
Acquired with credit deterioration	350	-	-	420	-	-
Real estate - construction	-	-	-	1,228	34	-
Real estate - mortgage	2,122	14	16	3,289	16	19
Acquired with credit deterioration	698	-	-	379	-	-
Personal	9	-	-	-	-	-
	\$6,384	\$ 14	\$ 16	\$11,383	\$ 306	\$ 19

The following table presents nonaccrual loans by classes of the loan portfolio as of September 30, 2018 and December 31, 2017.

### (Dollars in thousands)

	Sep	otember 30, 2018	December 31, 2017			
Nonaccrual loans:						
Commercial, financial and agricultural	\$	-	\$	4		
Real estate - commercial		910		953		
Real estate - mortgage		1,622		1,917		
Personal		17		-		
Total	\$	2,549	\$	2,874		

The performance and credit quality of the loan portfolio is also monitored by analyzing the age of the loans receivable as determined by the length of time a recorded payment is past due. The following tables present the classes of the loan portfolio summarized by the past due status as of September 30, 2018 and December 31, 2017.

						Loans
						Past
						Due
						Greater
30-59	60-89	Greater				than 90
Days Past	Days Past	than oo	Total Past		Total	Days and
				Current	Loans	Accruing
Duc	Duc	Days	Duc	Current	Loans	Acciding
\$ 49	_	_	\$ 49	\$49,673	\$49,722	\$ -
, -			, -	, ,,,,,,	, - ,-	
729	-	-	729	134,409	135,138	-
	148	-	148	361	509	-
317	-	-	317	36,633	36,950	-
		-				
1,428	555	60	2,043	164,096	166,139	60
318	-	260	578	481	1,059	260
				17 755	17 755	
-	-	-	-	17,733	17,733	
22	-	1	23	10,780	10,803	1
\$ 2,863	\$ 703	\$ 321	\$ 3,887	\$414,188	\$418,075	\$ 321
	Days Past Due \$ 49 729 317 1,428 318 - 22	Days Past Past Due  \$ 49  -  729 - 148 317 -  1,428 555 318 22 -	Days       than         Past       90         Due       Due         \$ 49       -         729       -         148       -         317       -         -       -         1,428       555       60         318       -       260         -       -       -         22       -       1	Days         Days         than         Total           Past         90         Past           Due         Days         Due           \$ 49         -         -         \$ 49           729         -         -         729           148         -         148           317         -         -         317           -         -         -         -           1,428         555         60         2,043           318         -         260         578           -         -         -         -           22         -         1         23	Days Past Past Due         Days Due         than Past Past Due         Total Past Due         Past Current           \$49         -         -         \$49         \$49,673           729         -         -         729         134,409           148         -         148         361           317         -         -         317         36,633           -         -         -         -           1,428         555         60         2,043         164,096           318         -         260         578         481           -         -         -         -         17,755           22         -         1         23         10,780	Days Past Past Past Due         Days Due         Total Current         Total Loans           \$ 49         -         -         \$ 49         \$ 49,673         \$ 49,722           729         -         -         729         134,409         135,138           148         -         148         361         509           317         -         -         317         36,633         36,950           -         -         -         -         164,096         166,139           318         -         260         578         481         1,059           -         -         -         17,755         17,755           22         -         1         23         10,780         10,803

Loans Past

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	30-59	60-89	Greate	r			Due Greater than 90
(Dollars in thousands)	Days Past	Days Past	than 90	Total Past		Total	Days and
	Due	Due	Days	Due	Current	Loans	Accruing
As of December 31, 2017							
Commercial, financial and agricultural	\$ -	\$ -	\$ -	\$ -	\$45,802	\$45,802	\$ -
Real estate - commercial:							
Real estate - commercial	16	23	-	39	140,139	140,178	-
Acquired with credit deterioration	-	-	28	28	163	191	28
Real estate - construction	-	-	-	-	28,403	28,403	-
Real estate - mortgage:							
Real estate - mortgage	694	80	64	838	145,713	146,551	64
Acquired with credit deterioration	-	-	123	123	214	337	123
Obligations of states and political subdivisions	-	-	-	-	13,044	13,044	-
Personal	66	6	-	72	9,326	9,398	-
Total	\$ 776	\$ 109	\$ 215	\$ 1,100	\$382,804	\$383,904	\$ 215

The following tables summarize information regarding troubled debt restructurings by loan portfolio class at September 30, 2018 and December 31, 2017.

(Dollars in thousands)	Number of	Ou	Outstanding		e e			
	Contracts	Inv	estment	Inv	estment	Rec	orded Investment	
As of September 30, 2018								
Accruing troubled debt restructurings:								
Real estate - mortgage	8	\$	522	\$	550	\$	439	
Non-accruing troubled debt restructurings:								
Real estate - mortgage	1		25		25		18	
Real estate - mortgage	9	\$	547	\$	575	\$	457	
	9	Ψ	347	Ψ	313	Ψ	437	
		Pre	-Modification	Pos	t-Modification			
(Dollars in thousands)	Number of		tstanding corded		tstanding corded			
	Contracts	Inv	estment		estment	Rece	orded Investment	
As of December 31, 2017								
Accruing troubled debt restructurings:								
Real estate - mortgage	7	\$	369	\$	397	\$	315	
Non-accruing troubled debt restructurings:								
			10		20		1	
Commercial, financial, agricultural	1		19 25		20		4	
Real estate - mortgage	1 9	ф	25	ф	25	ф	20	
	ч	\$	413	\$	442	\$	339	

The Company's troubled debt restructurings are also impaired loans, which may result in a specific allocation and subsequent charge-off if appropriate. As of September 30, 2018, there were no specific reserves carried for troubled debt restructured loans. There were also no defaults of troubled debt restructurings that took place during the three or nine months ended September 30, 2018 or 2017 within 12 months of restructure. On December 31, 2017, there were no specific reserves carried for the troubled debt restructurings. There was one troubled debt restructured loan for \$4,000 at December 31, 2017 for which an \$8,000 charge-off was recorded in 2017. The amended terms of the restructured loans vary, and may include interest rates that have been reduced, principal payments that have been reduced or deferred for a period of time and/or maturity dates that have been extended.

There were no loan terms modified resulting in troubled debt restructuring during the three months ended September 30, 2018 or 2017. There was one loan in both the nine months ended September 30, 2018 and 2017, whose terms were modified resulting in troubled debt restructuring. The following tables list the loans whose terms were modified resulting in a troubled debt restructuring during the nine month periods ended September 30, 2018 and 2017.

(Dollars in thousands)	Number of Contracts	Outstanding Recorded		Out Rec	Outstanding Recorded		orded Investment
Nine Months Ended September 30, 2018 Accruing troubled debt restructurings:							
Real estate - mortgage	1	\$	153	\$	153	\$	153
	1	\$	153	\$	153	\$	153
		Pre	-Modification	Pos	t-Modification		
(Dollars in thousands)	Number of		standing corded		standing orded		
	Contracts	Inv	estment	Inv	estment	Rec	orded Investment
Nine Months Ended September 30, 2017							
Accruing troubled debt restructurings:							
Commercial, financial, agricultural	1	\$	19	\$	20	\$	7
	1	\$	19	\$	20	\$	7

Consumer mortgage loans secured by residential real estate properties for which formal foreclosure proceedings were in process at September 30, 2018 and December 31, 2017 totaled \$990,000 and \$1,285,000, respectively.

The following tables summarize the activity in the allowance for loan losses and related investments in loans receivable.

# As of, and for the periods ended, September 30, 2018

	Commercia	1,			Obligations of states and	
(Dollars in thousands)	financial and	Real estate	Real estate	Real estate	political	
	agricultural	commercial	construction	n mortgage	subdivision	s Personal Total
Allowance for loan losses:						
Beginning balance, July 1, 2018	\$ 348	\$ 1,062	\$ 327	\$ 1,261	\$ -	\$ 60 \$3,058
Charge-offs	-	(9)	-	(48	) -	(12 ) (69 )
Recoveries	3	-	-	7	-	7 17
Provisions	(56	(3)	43	40	-	8 32
Ending balance, September 30, 2018	\$ 295	\$ 1,050	\$ 370	\$ 1,260	\$ -	\$ 63 \$3,038

	Commercial	,			Obligations of states and		
	financial and	Real estate	Real estate	Real estate	political		
	agricultural	commercial	construction	mortgage	subdivisions	Personal	Total
Allowance for loan losses:							
Beginning balance, January 1, 2018	\$ 273	\$ 1,022	\$ 288	\$ 1,285	\$ -	\$71	\$2,939
Charge-offs	-	(60)	-	(76	-	(35)	(171)
Recoveries	9	5	-	12	-	13	39
Provisions	13	83	82	39	-	14	231
Ending balance, September 30, 2018	\$ 295	\$ 1,050	\$ 370	\$ 1,260	\$ -	\$63	\$3,038
collectively evaluated for impairment	\$ 295	\$ 1,050	\$ 370	\$ 1,260	\$ -	\$63	\$3,038
Loans receivable:							
Ending balance	\$ 49,722	\$ 135,647	\$ 36,950	\$ 167,198	\$ 17,755	\$10,803	\$418,075
individually evaluated for impairment	-	\$ 910	\$ -	\$ 2,011	\$ -	\$17	2,938
acquired with credit deterioration	-	\$ 509	\$ -	\$ 1,059	\$ -	\$-	1,568

collectively evaluated for impairment \$49,722 \$134,228 \$36,950 \$164,128 \$17,755 \$10,786 \$413,569

# As of, and for the periods ended, September 30, 2017

(Dollars in thousands)  Allowance for loan losses:		fir an		ıl	Re	eal est mmer		-				-	eal e			Obligation of states and political subdivisi	d	erso	on	al T	otal	
Beginning balance, July 1, 20	017	\$	402			1,125		\$	1	72			1,09	93		\$ -	\$				2,87	
Charge-offs			(9	)		(70		)	-				(37		)	-		(7		-	(123	)
Recoveries Provisions			2 (33	)		100			3	Λ			1 50			-		2 2			5 149	
Ending balance, September 3	80		`	,												_						
2017	, ,	\$	362		\$	1,155		\$	2	02		\$	1,10	)7		\$ -	\$	81	[	\$	2,90	7
Allowance for loan losses:	fina and	anci I		Rea		state	-				-		estat age	e	of sta pol	ligations tes and litical odivisions	Pers	ona	ıl	Tota	al	
Beginning balance, January 1, 2017	\$ 3	18		\$ 94	48		\$ 2	231			\$ 1.	,14	3		\$ -		\$83			\$2,7	723	
Charge-offs Recoveries Provisions	2	46 8	)	(7 - 27		)	-	(29		)	(1 4: 3!		)	)	- - -		(24 8 14	ļ	)	(26 55 38		)
Ending balance,	\$ 3	62		\$ 1,	155	5	\$ 2	202	,		\$ 1.	,10	7		\$ -		\$81			\$2,9	907	
September 30, 2017 collectively evaluated for impairment	\$ 3	62		\$ 1,	155	5	\$ 2	202			\$ 1.	,10	7		\$ -		\$81			\$2,9	907	
Loans receivable: Ending balance individually evaluated for impairment		8,55 56	51	\$ 13 5,	34,3 842		\$ 2	28,	145			47, ,52	783 1		\$ 1 -	3,862	\$ 9,9 -	35			2,61 719	6
acquired with credit	-			19	99		-	•			3	43			-		_			54	2	
deterioration collectively evaluated for impairment	\$ 4	8,19	95	\$ 12	28,2	299	\$ 2	28,	145		\$ 14	44,	919		\$ 1	3,862	\$9,9	35		\$37	3,35	5

### As of December 31, 2017

	Commercial	,			Obligations of states and		
(Dollars in thousands)	financial and	Real estate	Real estate -	Real estate	political		
	agricultural	commercial	construction	nmortgage	subdivisions	Personal	Total
Allowance for loan losses:							
Beginning balance, January 1, 2017	\$ 318	\$ 948	\$ 231	\$ 1,143	\$ -	\$83	\$2,723
Charge-offs	(46)	(70)	-	(149)	-	(27)	(292)
Recoveries	5	2	-	45	-	17	69
Provisions	(4)	142	57	246	-	(2)	439
Ending balance, December 31, 2017	\$ 273	\$ 1,022	\$ 288	\$ 1,285	\$ -	\$71	\$2,939
collectively evaluated for impairment	\$ 273	\$ 1,022	\$ 288	\$ 1,285	\$ -	\$71	\$2,939
Loans receivable:							
Ending balance	\$ 45,802	\$ 140,369	\$ 28,403	\$ 146,888	\$ 13,044	\$9,398	\$383,904
individually evaluated for impairment	468	5,031	-	2,232	-	-	7,731
acquired with credit deterioration	-	191	-	337	-	-	528
collectively evaluated for impairment	\$ 45,334	\$ 135,147	\$ 28,403	\$ 144,319	\$ 13,044	\$ 9,398	\$375,645

### 8. Goodwill and other intangible assets

### Goodwill

On September 8, 2006, the Company acquired a branch office in Richfield, PA. Goodwill associated with this transaction is carried at \$2,046,000. On November 30, 2015, the Company acquired FNBPA Bancorp, Inc. and as a result, carries goodwill of \$3,402,000 relating to the acquisition. In addition, the Company acquired the remainder of the outstanding common stock of Liverpool Community Bank on April 30, 2018, and as a result, carries goodwill of \$3,691,000 relating to the acquisition.

Total goodwill at September 30, 2018 and December 31, 2017 was \$9,139,000 and \$5,448,000, respectively. Goodwill is not amortized but is tested annually for impairment or more frequently if certain events occur which might indicate goodwill has been impaired. There was no impairment of goodwill during the three or nine month periods ended September 30, 2018 or 2017.

Intangible Assets

On November 30, 2015, a core deposit intangible in the amount of \$303,000 associated with the FNBPA Bancorp, Inc. acquisition was recorded and is being amortized over a ten-year period using a sum of the year's digits basis. Other intangible assets in the amount of \$40,000 were also identified and recorded as of November 30, 2015. The other intangible assets were amortized on a straight-line basis over two years, through November 30, 2017. Amortization expense recognized for the intangibles related to the FNBPA acquisition in the three and nine months ended September 30, 2018 was \$11,000 and \$33,000, respectively.

On April 30, 2018, a core deposit intangible in the amount of \$289,000 associated with the Liverpool Community Bank acquisition was recorded and is being amortized over a ten-year period using a sum of the year's digit basis. Amortization expense recognized for the intangible related to the Liverpool Community Bank acquisition in the three and nine months ended September 30, 2018 was \$13,000 and \$22,000, respectively.

The following table shows the amortization schedule for each of the intangible assets recorded.

	FI	NBPA	FN	IBPA	L	СВ
	A	cquisition	Ac	quisition	A	cquisition
	C	ore	Ot	her	Co	ore
(Dollars in thousands)	D	eposit	Int	angible	D	eposit
		tangible	Assets		In	tangible
Beginning Balance at Acquisition Date	\$	303	\$	40	\$	289
Amortization expense recorded prior to January 1, 2017		59		22		-
Amortization expense recorded in the twelve months ended December 31, 2017		49		18		-
Unamortized balance as of December 31, 2017		195		-		-
Amortization expense recorded in the nine months ended September 30, 2018		33		-		22
Unamortized balance as of September 30, 2018	\$	162	\$	-	\$	267
Scheduled remaining amortization expense for years ended:						
December 31, 2018	\$	11			\$	13
December 31, 2019		38				49

December 31, 2020	33	44
December 31, 2021	27	39
December 31, 2022	21	33
After December 31, 2022	32	89

### 9. Unconsolidated Subsidiary

The Company no longer has an investment in an unconsolidated subsidiary following its acquisition of the remainder of the outstanding common stock of Liverpool on April 30, 2018. Prior to the acquisition, the Company owned 39.16% of the outstanding common stock of Liverpool. The investment was accounted for under the equity method of accounting. The Company increased its investment in LCB for its share of earnings and decreased its investment by any dividends received from LCB. The investment was evaluated quarterly for impairment. A loss in value of the investment which is determined to be other than a temporary decline would have been recognized as a loss in the period in which such determination was made. Evidence of a loss in value might include, but would not necessarily be limited to, absence of an ability to recover the carrying amount of the investment or inability of LCB to sustain an earnings capacity that would justify the current carrying value of the investment. There was no impairment of the investment relating to LCB prior to the acquisition on April 30, 2018.

The following table illustrates the components of the income/gain from the unconsolidated subsidiary investment recorded for the three and nine months ended September 30, 2018 and 2017.

	Thro Mor End Sept	nths	Nine M Ended Septem		
		2018	30, 2018		
	201	8 2017	2018	2017	
Income from unconsolidated subsidiary (excluding merger- related adjustments)					
Dividend income	\$ -	\$ 13	\$36	\$49	
Equity income	-	36	45	105	
Total income (excluding merger-related adjustments)	-	49	81	154	
Merger-related adjustments for investment in unconsolidated subsidiary					
Adjustment to LCB book value at April 30, 2018	-	-	(239)	-	
Special merger-related dividend	-	-	39	-	
Fair value gain	-	-	415	-	
Total merger-related adjustments	-	-	215	-	
Total income/gain from unconsolidated subsidiary	\$ -	\$ 49	\$296	\$154	

#### 10. Fair Value Measurement

Fair value measurement and disclosure guidance defines fair value as the price that would be received to sell an asset or transfer a liability in an orderly transaction (that is, not a forced liquidation or distressed sale) between market participants at the measurement date under current market conditions. Additional guidance is provided on determining when the volume and level of activity for the asset or liability has significantly decreased. The guidance also includes guidance on identifying circumstances when a transaction may not be considered orderly.

Fair value measurement and disclosure guidance provides a list of factors that a reporting entity should evaluate to determine whether there has been a significant decrease in the volume and level of activity for the asset or liability in relation to normal market activity for the asset or liability. When the reporting entity concludes there has been a significant decrease in the volume and level of activity for the asset or liability, further analysis of the information from that market is needed, and significant adjustments to the related prices may be necessary to estimate fair value in accordance with fair value measurement and disclosure guidance.

This guidance clarifies that, when there has been a significant decrease in the volume and level of activity for the asset or liability, some transactions may not be orderly. In those situations, the entity must evaluate the weight of the

evidence to determine whether the transaction is orderly. The guidance provides a list of circumstances that may indicate that a transaction is not orderly. A transaction price that is not associated with an orderly transaction is given little, if any, weight when estimating fair value.

Fair value measurement and disclosure guidance defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. A fair value measurement assumes that the transaction to sell the asset or transfer the liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability. The price in the principal (or most advantageous) market used to measure the fair value of the asset or liability is not adjusted for transaction costs. An orderly transaction is a transaction that assumes exposure to the market for a period prior to the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets and liabilities; it is not a forced transaction. Market participants are buyers and sellers in the principal market that are (i) independent, (ii) knowledgeable, (iii) able to transact and (iv) willing to transact.

Fair value measurement and disclosure guidance requires the use of valuation techniques that are consistent with the market approach, the income approach and/or the cost approach. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets and liabilities. The income approach uses valuation techniques to convert future amounts, such as cash flows or earnings, to a single present amount on a discounted basis. The cost approach is based on the amount that currently would be required to replace the service capacity of an asset (replacement cost). Valuation techniques should be consistently applied. Inputs to valuation techniques refer to the assumptions that market participants would use in pricing the asset or liability developed based on market data obtained from independent sources, or unobservable, meaning those that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances. In that regard, the guidance establishes a fair value hierarchy for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The fair value hierarchy is as follows:

**Level 1 Inputs** – Unadjusted quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

**Level 2 Inputs** – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These might include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, volatilities, prepayment speeds, credit risks, etc.) or inputs that are derived principally from or corroborated by market data by correlation or other means.

**Level 3 Inputs** – Unobservable inputs for determining the fair values of assets or liabilities that reflect an entity's own assumptions about the assumptions that market participants would use in pricing the assets or liabilities.

An asset's or liability's placement in the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

A description of the valuation methodologies used for assets and liabilities measured at fair value, as well as the general classification of such assets and liabilities pursuant to the valuation hierarchy, is set forth below.

In general, fair value is based upon quoted market prices, where available. If such quoted market prices are not available, fair value is based upon internally developed models that primarily use, as inputs, observable market-based parameters. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value. These adjustments may include amounts to reflect counterparty credit quality and the Company's creditworthiness, among other things, as well as unobservable parameters. Any such valuation adjustments are applied consistently over time. The Company's valuation methodologies may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. While management believes the Company's valuation methodologies are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

*Equities Securities* – The fair value of equity securities is based upon quoted prices in active markets and is reported using Level 1 inputs.

Securities Available for Sale – Debt securities classified as available for sale are reported at fair value utilizing Level 2 inputs. For these securities, the Company obtains fair value measurement from an independent pricing service. The fair value measurements consider observable data that may include dealer quotes, market spreads, cash flows, the U.S. Treasury yield curve, live trading levels, trade execution data, market consensus prepayment speeds, credit information and the bond's terms and conditions, among other things. Equity securities classified as available for sale are reported at fair value using Level 1 and Level 2 inputs.

*Impaired Loans* – Certain impaired loans are reported on a non-recurring basis at the fair value of the underlying collateral since repayment is expected solely from the collateral. Fair value is generally determined based upon independent third-party appraisals of the properties, or discounted cash flows based upon the expected proceeds. These assets are included as Level 3 fair values, based upon the lowest level of input that is significant to the fair value measurements.

Other Real Estate Owned – Certain assets included in other real estate owned are carried at fair value as a result of impairment and accordingly are presented as measured on a non-recurring basis. Values are estimated using Level 3 inputs, based on appraisals that consider the sales prices of property in the proximate vicinity.

*Mortgage Servicing Rights* – The fair value of servicing assets is based on the present value of estimated future cash flows on pools of mortgages stratified by rate and maturity date and are considered Level 3 inputs.

The following tables summarize financial assets and financial liabilities measured at fair value as of September 30, 2018 and December 31, 2017, segregated by the level of the valuation inputs within the fair value hierarchy utilized to measure fair value. There were no transfers of assets between fair value Level 1 and Level 2 during the nine months ended September 30, 2018 or 2017.

(Dollars in thousands)	September 30, 2018	(Level 1) Quoted Prices in Active Markets for Identical Assets	Other	(Level 3) Significant Other Unobservable Inputs
Measured at fair value on a recurring basis: Debt securities available-for-sale: Obligations of U.S. Government agencies and corporations Obligations of state and political subdivisions Mortgage-backed securities Equity securities	\$ 33,702 19,515 85,433 1,162	\$ - - - 1,162	\$ 33,702 19,515 85,433	\$ - - -
Measured at fair value on a non-recurring basis: Impaired loans Other real estate owned Mortgage servicing rights	\$ 1,215 - 208	\$ - - -	\$ - - -	\$ 1,215 - 208
(Dollars in thousands)  Measured at fair value on a recurring basis:	December 31, 2017	(Level 1) Quoted Prices in Active Markets for Identical Assets	Other	(Level 3) Significant Other Unobservable Inputs
		Quoted Prices in Active Markets for Identical	Significant Other Observable	Significant Other Unobservable

The following tables present additional quantitative information about assets measured at fair value on a nonrecurring basis and for which Level 3 inputs have been used to determine fair value:

	thousands)

September 30, 2018	Fair Value Estimate	Valuation Technique	Unobservable Input	Range	Weigh Averag	
Impaired loans	\$ 1,215	Appraisal of collateral (1)	Appraisal and liquidation adjustments (2)	0% - 15%	13	%
Other real estate owned		Appraisal of collateral (1)	Appraisal and liquidation adjustments (2)	0%	0	%
Mortgage servicing rights	208	Multiple of annual servicing fee	Estimated pre-payment speed, based on rate and term	300% - 400%	369	%

# (Dollars in thousands)

December 31, 2017	Fair Value Estimate	Valuation Technique	Unobservable Input	Range	Weighte Average	
Impaired loans	\$ 1,574	Appraisal of collateral (1)	Appraisal and liquidation adjustments (2)	0% - 13%	8	%
Other real estate owned	27	Appraisal of collateral (1)	Appraisal and liquidation adjustments (2)	22%	22	%
Mortgage servicing rights	225	Multiple of annual servicing fee	Estimated pre-payment speed, based on rate and term	300% - 400%	371	%

<sup>(1)</sup> Fair value is generally determined through independent appraisals of the underlying collateral that generally include various Level 3 inputs which are not identifiable.

### Fair Value of Financial Instruments

Management uses its best judgment in estimating the fair value of the Company's financial instruments; however, there are inherent weaknesses in any estimation technique. Therefore, the fair value estimates reported herein are not necessarily indicative of the amounts the Company could have realized in sales transactions on the dates indicated. The estimated fair value amounts have been measured as of their respective year ends and have not been re-evaluated or updated for purposes of these consolidated financial statements subsequent to those respective dates. As such, the estimated fair values of these financial instruments subsequent to the respective reporting dates may be different from the amounts reported at each quarter end.

The information presented below should not be interpreted as an estimate of the fair value of the entire Company since a fair value calculation is provided only for a limited portion of the Company's assets and liabilities. Due to a wide range of valuation techniques and the degree of subjectivity used in making the estimates, comparisons between the Company's disclosures and those of other companies may not be meaningful.

The following discussion describes the estimated fair value of the Company's financial instruments as well as the significant methods and assumptions not previously disclosed used to determine these estimated fair values.

Appraisals may be adjusted downward by management for qualitative factors such as economic conditions and (2) estimated liquidation expenses. The range of liquidation expenses and other appraisal adjustments are presented as a percent of the appraisal.

Carrying values approximate fair value for cash and due from banks, interest-bearing demand deposits with banks, restricted stock in the Federal Home Loan Bank, loans held for sale, interest receivable, mortgage servicing rights, non-interest bearing deposits, securities sold under agreements to repurchase, short-term borrowings and interest payable. Other than cash and due from banks, which are considered Level 1 inputs, and mortgage servicing rights, which are Level 3 inputs, these instruments are Level 2 inputs.

*Interest bearing time deposits with banks* – The estimated fair value is determined by discounting the contractual future cash flows, using the rates currently offered for deposits of similar remaining maturities.

Loans – As of September 30, 2018, the fair values of loans were estimated on an exit price basis due to the adoption of ASU 2016-01, incorporating discounts for credit, liquidity and marketability factors. These fair values are not comparable with the fair values disclosed as of December 31, 2017, which were based on an entrance price basis. As of that date, fair values of variable rate loans that reprice frequently and which entail no significant changes in credit risk were based on carrying values. The fair values of other loans as of that date were estimated by calculating the present value of the cash flow difference between the current rate and the market rate, for the average maturity, discounted quarterly at the market rate.

*Fixed rate time deposits* – The estimated fair value is determined by discounting the contractual future cash flows, using the rates currently offered for deposits of similar remaining maturities.

*Long-term debt and other interest-bearing liabilities* – The fair value is estimated using discounted cash flow analysis, based on incremental borrowing rates for similar types of arrangements.

Commitments to extend credit and letters of credit – The fair value of commitments to extend credit is estimated using the fees currently charged to enter into similar agreements, considering market interest rates, the remaining terms and present credit-worthiness of the counterparties. The fair value of guarantees and letters of credit is based on fees currently charged for similar agreements.

The estimated fair values of the Company's financial instruments are as follows:

	Financial Instruments					
	September	30, 2018	December	31, 2017		
(Dollars in thousands)	Carrying	Fair	Carrying	Fair		
	Value	Value	Value	Value		
Financial assets:						
Cash and due from banks	\$14,280	\$14,280	\$9,839	\$9,839		
Interest bearing deposits with banks	35	35	58	58		
Federal funds sold	1,013	1,013	-	-		
Interest bearing time deposits with banks	3,535	3,510	350	350		
Equity securities	1,162	1,162	-	-		
Available for sale securities	138,650	138,650	153,824	153,824		
Restricted investment in FHLB stock	2,170	2,170	3,104	3,104		
Loans, net of allowance for loan losses	415,037	408,456	380,965	372,906		
Mortgage servicing rights	208	208	225	225		
Accrued interest receivable	1,761	1,761	1,582	1,582		
Financial liabilities:						
Non-interest bearing deposits	\$123,709	\$123,709	\$115,911	\$115,911		
Interest bearing deposits	406,078	404,957	361,757	361,468		
Securities sold under agreements to repurchase	3,759	3,759	9,769	9,769		
Short-term borrowings	593	593	12,000	12,000		
Long-term debt	15,000	14,923	25,000	24,885		
Other interest bearing liabilities	1,568	1,569	1,593	1,595		
Accrued interest payable	315	315	300	300		
Off-balance sheet financial instruments:						
Commitments to extend credit	\$-	\$-	\$-	\$-		
Letters of credit	-	-	-	-		

The following tables present the carrying amount, fair value and placement in the fair value hierarchy of the Company's financial instruments not previously disclosed as of September 30, 2018 and December 31, 2017. This table excludes financial instruments for which the carrying amount approximates fair value.

			(Level 1)	(Level 2)	(Level 3)
			Quoted Prices in	Significant	Significant
			Active Markets	Other	Other
(Dollars in thousands)	Carrying		for Identical	Observable	Unobservable
	Amount	Fair Value	Assets or Liabilities	Inputs	Inputs

September 30, 2018

Financial instruments - Assets

Interest bearing time deposits with banks	\$3,535	\$3,510	\$ -	\$3,510	\$ -
Loans, net of allowance for loan losses	415,037	408,456	-	-	408,456
Financial instruments - Liabilities					
Interest bearing deposits	\$406,078	\$404,957	\$ -	\$ 404,957	\$ -
Long-term debt	15,000	14,923	-	14,923	-
Other interest bearing liabilities	1,568	1,569	-	1,569	-

(Dollars in thousands)	Carrying Amount	Fair Value	(Level 1) Quoted Prices in Active Markets for Identical Assets or Liabilities		(Level 2) Significant Other Observable Inputs	(Level 3) Significant Other Unobservable Inputs
December 31, 2017					1	1
Financial instruments - Assets						
Interest bearing time deposits with banks	\$350	\$350	\$	-	\$ 350	\$ -
Loans, net of allowance for loan losses	380,965	372,906		-	-	372,906
Financial instruments - Liabilities						
Interest bearing deposits	\$361,757	\$ 361,468	\$	-	\$ 361,468	\$ -
Long-term debt	25,000	24,885		-	24,885	-
Other interest bearing liabilities	1,593	1,595		-	1,595	-

#### 11. Defined Benefit Retirement Plan

The Company sponsors a defined benefit retirement plan, The Juniata Valley Bank Retirement Plan ("JVB Plan"), which covers substantially all of its employees employed prior to December 31, 2007. As of January 1, 2008, the JVB Plan was amended to close the plan to new entrants. All active participants as of December 31, 2007 became 100% vested in their accrued benefit and, as long as they remained eligible, continued to accrue benefits until December 31, 2012. The benefits are based on years of service and the employee's compensation. Effective December 31, 2012, the JVB Plan was amended to cease future service accruals after that date (i.e., it was frozen).

As a result of the FNBPA acquisition, as of November 30, 2015, the Company assumed sponsorship of a second defined benefit retirement plan, the Retirement Plan for the First National Bank of Port Allegany ("FNB Plan"), which covers substantially all former FNBPA employees that were employed prior to September 30, 2008. The FNBPA Plan was amended as of December 31, 2015 to cease future service accruals to previously unfrozen participants and is now considered to be "frozen". Effective December 31, 2016, the FNB Plan was merged into the JVB Plan, which was amended to provide the same benefits to the class of participants previously included in the FNB Plan.

In 2017, Juniata initiated a strategy to reduce the liability associated with its defined benefit pension plan. The first step of the initiative consisted of the purchase of a single premium group annuity for a group of Juniata's retirees, transferring the associated pension liability to the issuer of the annuity. This step reduced Juniata's overall pension liability by approximately 12%, which resulted in a pre-tax charge to earnings of \$377,000 in the fourth quarter of 2017. This pre-tax charge represents an acceleration of pension expenses that would otherwise have impacted Juniata's earnings in the future.

The Company initiated and completed the second step of this strategy during the third quarter of 2018 by making a lump sum payment offer to a small group of terminated vested participants in the Company's defined benefit plan. This second step further reduced Juniata's remaining pension liability by approximately 9%, which resulted in a pre-tax charge to earnings of \$210,000 in the third quarter of 2018. The pre-tax charge represents a further acceleration of pension expenses that would otherwise have impacted Juniata's future earnings.

The Company's funding policy with respect to the JVB Plan is to contribute annually no more than the maximum amount that can be deducted for federal income tax purposes. Contributions are intended to provide for benefits attributed to service through December 31, 2012. The Company made a \$1,350,000 contribution during the three and nine months ended September 30, 2018. No contribution was made during 2017.

In August 2018, Juniata's Board of Directors resolved to terminate the JVB Plan, effective November 30, 2018. All participants have been properly notified and settlement of all obligations is expected to occur in mid-2019.

Pension expense included the following components for the three and nine month periods ended September 30, 2018 and 2017:

(Dollars in thousands)	Three M Ended Septem 2018	Months aber 30, 2017	Nine M Ended Septem 2018	
Components of net periodic pension (benefit) cost:				
Interest cost	\$130	\$161	\$394	\$483
Expected return on plan assets	(172)	(202)	(556)	(605)
Recognized net actuarial loss	242	57	323	170
Net periodic pension cost	\$200	\$16	\$161	\$48
Amortization of net actuarial loss recognized in other comprehensive income	\$(242)	\$(57)	\$(323)	\$(170)
Total recognized in net periodic pension cost and other comprehensive income	\$(42)	\$(41)	\$(162)	\$(122)

#### 12. Commitments, Contingent Liabilities and Guarantees

In the ordinary course of business, the Company makes commitments to extend credit to its customers through letters of credit, loan commitments and lines of credit. At September 30, 2018, the Company had \$72,851,000 outstanding in loan commitments and other unused lines of credit extended to its customers as compared to \$77,023,000 at December 31, 2017.

The Company does not issue any guarantees that would require liability recognition or disclosure, other than its letters of credit. Letters of credit are conditional commitments issued by the Company to guarantee the performance of a customer to a third-party. Generally, financial and performance letters of credit have expiration dates within one year of issuance, while commercial letters of credit have longer term commitments. The credit risk involved in issuing letters of credit is essentially the same as the risks that are involved in extending loan facilities to customers. The Company generally holds collateral and/or personal guarantees supporting these commitments. The Company had outstanding \$3,027,000 and \$2,541,000 of financial and performance letters of credit commitments as of September 30, 2018 and December 31, 2017, respectively. Commercial letters of credit as of September 30, 2018 and December 31, 2017 totaled \$11,983,000 and \$12,650,000, respectively. Management believes that the proceeds obtained through a liquidation of collateral and the enforcement of guarantees would be sufficient to cover the potential amount of future payments required under the corresponding guarantees. The amount of the liability as of September 30, 2018 for payments under letters of credit issued was not material. Because these instruments have fixed maturity dates, and because many of them will expire without being drawn upon, they do not generally present any significant liquidity risk.

Additionally, the Company has sold qualifying residential mortgage loans to the FHLB as part of its Mortgage Partnership Finance Program ("Program"). Under the terms of the Program, there is limited recourse back to the Company for loans that do not perform in accordance with the terms of the loan agreement. Each loan sold under the Program is "credit enhanced" such that the individual loan's rating is raised to "BBB", as determined by the FHLB. The Program can be terminated by either the FHLB or the Company, without cause. The FHLB has no obligation to commit to purchase any mortgage loans through, or from, the Company.

#### 13. REVENUE RECOGNITION

As disclosed in Note 2, as of January 1, 2018, the Company adopted ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)", as well as subsequent ASU's that modified ASC 606. The Company elected to apply the ASU and all related ASU's using the modified retrospective approach applied to all contracts initiated on or after the effective date, and for contracts which have remaining obligations as of the effective date, while prior period results continue to be reported under legacy U.S. GAAP. Based on this assessment, the Company concluded that ASC 606 did not materially change the method by which the Company currently recognizes revenue for these revenue streams, which is by recognizing revenues as they are earned based upon contractual terms, as transactions occur, or as services are provided and collectability is reasonably assured.

The Company generally acts in a principal capacity, on its own behalf, in most contracts with customers. In such transactions, revenue and related costs to provide these services are recognized on a gross basis in the financial statements. In some cases, the Company acts in an agent capacity, deriving revenue through assisting other entities in transactions with its customers. In such transactions, revenue and the related costs to provide the services are recognized on a net basis in the financial statements. These transactions primarily relate to non-deposit product commissions and fees derived from customer's use of various interchange and ATM/debit card networks.

All of the Company's revenue from contracts with customers in the scope of ASC 606 are recognized within non-interest income on the consolidated statements of income, except for the gain/loss on the sale of other real estate owned, which is included in other non-interest expense. Revenue streams not within the scope of ASC 606 included in non-interest income on the consolidated statements of income include earnings on bank-owned life insurance and annuities, income from unconsolidated subsidiary, fees derived from loan activity, mortgage banking income, gain/loss on sales and calls of securities, and the change in value of equity securities.

A description of the Company's sources of revenue accounted for under ASC 606 are as follows:

Customer Service Fees – fees mainly represent fees from deposit customers for transaction based, account maintenance, and overdraft services. Transaction based fees include, but are not limited to, stop payment and overdraft fees. These fees are recognized at the time of the transaction when the performance obligation has been fulfilled. Account maintenance fees and account analysis fees are earned over the course of a month, representing the period of the performance obligation, and are recognized monthly.

Debit Card Fee Income – consists of interchange fees from cardholder transactions conducted through the card payment network. Cardholders use debit cards to conduct point-of-sale transactions that produce interchange fees. The Company acts in an agent capacity to offer processing services for debit cards to its customers. Fees are recognized with the processing of the transactions and netted against the related fees from such transactions.

Trust Fees – include asset management and estate fees. Asset management fees are generally based on a fee schedule, based upon the market value of the assets under management, and recognized monthly when the service obligation is completed. Trust fees recognized during the three and nine months ended September 30, 2018 totaled \$90,000 and \$278,000, respectively. Fees for estate management services are based on a specified fee schedule and generally recognized as the following performance obligations are fulfilled: (i) 25% of total estate fee recognized when all estate assets are collected and debts paid, (ii) 50% of the total fee is recognized when the inheritance tax return is filed, and (iii) remaining 25% is recognized when the first and final account is confirmed, settling the estate. Estate fees recognized during the three and nine months ended September 30, 2018 totaled \$1,000 and \$38,000, respectively.

Commissions From Sales Of Non-Deposit Products – include, but are not limited to, brokerage services, employer-based retirement solutions, individual retirement planning, insurance solutions, and fee-based investment advisory services. The Company acts in an agent capacity to offer these services to customers. Revenue is recognized, net of related fees, in the month in which the contract is fulfilled.

Other Non-Interest Income – includes certain revenue streams within the scope of ASC 606 comprised primarily of ATM surcharges, commissions on check orders, and wire transfer fees. ATM surcharges are the result of customers conducting ATM transactions that generate fee income. All of these fees, as well as wire transfer fees, are transaction based and are recognized at the time of the transaction. In addition, the Company acts in an agent capacity to offer checks to its customers and recognizes commissions, net of related fees, when the contract is fulfilled.

Gains/Losses On Sales Of Other Real Estate Owned – are recognized when control of the property transfers to the buyer, which generally occurs when the deed is executed.

#### Contract Balances

A contract asset balance occurs when an entity performs a service for a customer before the customer pays consideration (resulting in a contract receivable) or before payment is due (resulting in a contract asset). A contract liability balance is an entity's obligation to transfer a service to a customer for which the entity has already received payment (or payment is due from the customer. The company's non-interest revenue streams are largely based on transactional activity, or standard month-end revenue accruals such as asset management fees based on month-end market values. Consideration is often received immediately or shortly after the Company satisfies its performance obligation and revenue is recognized. The Company does not typically enter into longer-term revenue contracts with customer, and therefore, does not experience significant contract balances.

Contract	<b>Acquisition</b>	Costs
Commuci	acquisition	Cosis

The Company expenses all contract acquisition costs as costs are incurred.

# 14. Subsequent Events

On October 16, 2018, the Board of Directors declared a cash dividend of \$0.22 per share to shareholders of record on November 15, 2018, payable on November 30, 2018.

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

#### **Forward Looking Statements:**

The information contained in this Quarterly Report on Form 10-Q contains forward looking statements (as such term is defined in the Securities Exchange Act of 1934 and the regulations thereunder) including statements that are not historical facts or that address trends or management's intentions, plans, beliefs, expectations or opinions. Forward-looking statements can be identified by the use of words such as "believes", "expects", "anticipates", "may", "should" "will", "could", "estimates", "projects", "predicts", "potential", "continue", "plans", "future", "intends", "goal", "strategy", "li similar expressions. Any forward-looking statement made by us in this document is based only on information currently available to us and speaks only as of the date when made. Juniata undertakes no obligation to publicly update or revise forward looking information, whether as a result of new or updated information, future events, or otherwise. Forward-looking statements are not historical facts or guarantees of future performance, events or results and are subject to potential risks and uncertainties, many of which are outside of our control that could cause actual results to differ materially from this forward-looking information. Important factors that could cause our actual result and financial condition to differ materially from those indicated in the forward-looking statements include, without limitation:

the impact of adverse changes in the economy and real estate markets, including protracted periods of low-growth and sluggish loan demand;

the effect of market interest rates and relative balances of rate-sensitive assets to rate-sensitive liabilities on net interest margin and net interest income;

the effect of competition on rates of deposit and loan growth and net interest margin;

increases in non-performing assets, which may result in increases in the allowance for credit losses, loan charge-offs and elevated collection and carrying costs related to such non-performing assets;

other income growth, including the impact of regulatory changes which have reduced debit card interchange revenue;

investment securities gains and losses, including other than temporary declines in the value of securities which may result in charges to earnings;

- the effects of changes in the applicable federal income tax rate;
- the level of other expenses, including salaries and employee benefit expenses;
  - the impact of increased regulatory scrutiny of the banking industry;
- the increasing time and expense associated with regulatory compliance and risk management;

capital and liquidity strategies, including the impact of the capital and liquidity requirements modified by the Basel iIII standards;

- the Company's failure to identify and to address cyber-security risks;
- the Company's ability to keep pace with technological changes;
- the Company's ability to attract and retain talented personnel;
- the Company's reliance on its subsidiary for substantially all of its revenues and its ability to pay dividends;

the effects of changes in relevant accounting principles and guidelines on the presentation of the Company's financial condition and results of operations;

failure of third party service providers to perform their contractual obligations; and

the impact on earnings of the Company's strategy to reduce the liability associated with its defined benefit retirement plan.

For a more complete discussion of certain risks, uncertainties and other factors affecting the Company, refer to the Company's Risk Factors, contained in Item 1A of the Company's Annual Report on Form 10-K for the year ended December 31, 2017, a copy of which may be obtained from the Company upon request and without charge (except for the exhibits thereto), and Item 1A of Part II of this Quarterly Report on Form 10-Q.

#### **Critical Accounting Policies:**

Disclosure of the Company's significant accounting policies is included in the notes to the consolidated financial statements of the Company's Annual Report on Form 10-K for the year ended December 31, 2017. Any policies adopted after this date are included in the Note 1, *Basis of Presentation and Accounting Policies* of this Quarterly Report. Some of these policies require significant judgments, estimates, and assumptions to be made by management, most particularly in connection with determining the provision for loan losses and the appropriate level of the allowance for loan losses, as well as management's evaluation of the investment portfolio for other-than-temporary impairment.

#### General:

The following discussion relates to the consolidated financial condition of the Company as of September 30, 2018, as compared to December 31, 2017, and the consolidated results of operations for the three and nine months ended September 30, 2018, compared to the same period in 2017. This discussion should be read in conjunction with the interim consolidated financial statements and related notes included herein.

#### **Overview:**

Juniata Valley Financial Corp. is a Pennsylvania corporation organized in 1983 to be the holding company of The Juniata Valley Bank. The Bank is a state-chartered bank headquartered in Mifflintown, Pennsylvania. Juniata Valley Financial Corp. and its subsidiary bank derive substantially all of their income from banking and bank-related services, including interest earned on residential real estate, commercial mortgage, commercial and consumer loans, interest earned on investment securities and fee income from deposit services and other financial services to its customers. The Company completed its acquisition of FNBPA Bancorp, Inc. ("FNBPA") on November 30, 2015, at which time total assets increased by approximately \$92 million, or 19%. On April 30, 2018, Juniata acquired the remainder of the outstanding common stock of the Liverpool Community Bank ("LCB") of which it previously owned 39.16%. As of the merger date, total assets increased by approximately \$49 million, or 8%. Juniata now operates a total of 16 locations in Pennsylvania.

#### **Financial Condition:**

Total assets as of September 30, 2018, were \$620.7 million, an increase of \$28.7 million, or 4.9%, compared to December 31, 2017. Comparing the balances at September 30, 2018 and December 31, 2017, loans increased by \$34.2 million, while deposits increased by \$52.1 million, predominantly in interest bearing deposits. As of April 30, 2018, after acquisition accounting adjustments, the Company acquired approximately \$31.3 million in loans and \$36.1 million in deposits as a result of the Liverpool acquisition. During the same period, the Company utilized a strategy to apply cash flows from the investment portfolio to reduce high cost borrowings. This strategy led to a strategic decline in the investment portfolio of \$15.2 million and contributed to a decline in total borrowings of \$27.4 million, as did Liverpool's surplus funds position, which were also employed to reduce short-term borrowings.

The table below shows changes in deposit volumes by type of deposit between December 31, 2017 and September 30, 2018.

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(Dollars in thousands)	September 30,	December 31,	Change	
	2018	2017	\$	%
Deposits:				
Demand, non-interest bearing	\$ 123,709	\$ 115,911	\$7,798	6.7 %
Interest bearing demand and money market	150,083	122,407	27,676	22.6
Savings	102,663	98,966	3,697	3.7
Time deposits, \$250,000 and more	10,154	8,456	1,698	20.1
Other time deposits	143,178	131,928	11,250	8.5
Total deposits	\$ 529,787	\$ 477,668	\$52,119	10.9%

Total loans increased \$34.2 million, or 8.9%, between December 31, 2017 and September 30, 2018. As shown in the table below, all loan categories increased, except commercial real estate loans.

(Dollars in thousands)	September 30,	December 31,	Change	
	2018	2017	\$	%
Loans:				
Commercial, financial and agricultural	\$ 49,722	\$ 45,802	\$3,920	8.6 %
Real estate - commercial	135,647	140,369	(4,722)	(3.4)
Real estate - construction	36,950	28,403	8,547	30.1
Real estate - mortgage	167,198	146,888	20,310	13.8
Obligations of states and political subdivisions	17,755	13,044	4,711	36.1
Personal	10,803	9,398	1,405	14.9
Total loans	\$ 418,075	\$ 383,904	\$34,171	8.9 %

A summary of the activity in the allowance for loan losses for each of the nine month periods ended September 30, 2018 and 2017 is presented below.

(Dollars in thousands)	Periods Ended				
(Donars in thousands)	September 30,				
	2018	2017			
Balance of allowance - January 1	\$2,939	\$2,723			
Loans charged off	(171)	(260)			
Recoveries of loans previously charged off	39	55			
Net charge-offs	(132)	(205)			
Provision for loan losses	231	389			
Balance of allowance - end of period	\$3,038	\$2,907			
Ratio of net charge-offs during period to average loans outstanding	0.03 %	0.05 %			

As of September 30, 2018, 37 loans (exclusive of loans acquired from FNBPA and LCB with existing credit deterioration) with aggregate outstanding balances of \$2,938,000 were individually evaluated for impairment. A collateral analysis was performed on each of these 37 loans in order to establish a portion of the reserve needed to carry the impaired loans at fair value. There were no loans determined to have insufficient collateral, thus, the establishment of a specific reserve was not required for any of the impaired loans.

As of September 30, 2018, there were \$6,777,000 in special mention loans compared to \$34,456,000 at December 31, 2017 and \$13,324,000 in substandard loans compared to \$14,970,000 at December 31, 2017. As of June 30, 2018, management expanded the Company's internal credit quality risk ratings to include a pass/watch rating for loans whose performance may exhibit characteristics or conditions that could result in a downgrade to special mention in the future. The pass/watch rated loans are now reported within the pass rating classification. Prior to the second quarter of 2018, all watch and special mention rated loans were classified as special mention. As of June 30, 2018, the amount reclassified from the special mention rating to the pass/watch rating was \$32,603,000.

Management believes that the specific reserves carried are adequate to cover potential future losses related to these relationships. Other than as described herein, management does not believe there are any trends, events or uncertainties that are reasonably expected to have a material impact on future results of operations, liquidity, or capital resources. Further, based on known information, management believes that the effects of current and past economic conditions and other unfavorable business conditions may influence certain borrowers' abilities to comply with their repayment terms, and as such, continues to monitor the financial strength of these borrowers closely.

The following is a summary of the Bank's non-performing loans on September 30, 2018 as compared to December 31, 2017.

(Dollar amounts in thousands)	As of and for the nine months	As of and for the
	ended	year ended
	September 30,	December 31,
	2018	2017
Non-performing loans		
Non-accrual loans	\$ 2,549	\$ 2,787
Accruing loans past due 90 days or more, exclusive of loans acquired with credit deterioration	61	64
Restructured loans in default and non-accruing	-	87
Total	\$ 2,610	\$ 2,938
Average loans outstanding	406,659	385,411
Ratio of non-performing loans to average loans outstanding	0.64	% 0.76 %

Stockholders' equity increased from December 31, 2017 to September 30, 2018 by \$5,995,000, or 10.1%. The Company's net income exceeded dividends paid by \$991,000. The adjustment to accumulated other comprehensive loss to record the change in net unrealized gains from the unconsolidated subsidiary, the reclassification adjustment for losses on sales of debt securities, and the amortization of the costs associated with the Company's defined benefit retirement plan increased the Company's equity by \$1,027,000. The change in net unrealized losses from the change in market value of securities available for sale decreased shareholders' equity by \$2,639,000 when comparing September 30, 2018 to December 31, 2017. Stock based compensation expense recorded pursuant to the Company's Stock Option Plan added \$60,000 to stockholders' equity during the nine month period, while payments for exercised stock options increased shareholders' equity by \$91,000 and employee stock plans added \$42,000. In addition, the common stock issued to LCB shareholders increased total stockholders' equity by \$6,463,000. Treasury stock purchases during the nine months ended September 30, 2018 decreased stockholders' equity by \$40,000.

Subsequent to September 30, 2018, the following events took place:

On October 16, 2018, the Board of Directors declared a cash dividend of \$0.22 per share to shareholders of record on November 15, 2018, payable on November 30, 2018.

### Comparison of the Three Months Ended September 30, 2018 and 2017

#### **Operations Overview:**

Net income for the third quarter of 2018 was \$1,385,000, an increase of \$179,000, or 14.8%, when compared to the third quarter of 2017. Basic and diluted earnings per share also increased in the third quarter of 2018, to \$0.27 compared to \$0.25 in the third quarter of 2017. Annualized return on average equity for the three months ended September 30, 2018 was 8.59%, compared to 8.00% for the same period in 2017, representing an increase of 7.4%. For the three months ended September 30, annualized return on average assets was 0.89% in 2018, versus 0.81% in 2017. The comparability of the results of operations for the three months ended September 30, 2018 and financial condition at September 30, 2018 were impacted by the acquisition of Liverpool Community Bank on April 30, 2018. Further details are noted in the sections that follow.

Presented below are selected key ratios for the two periods:

	Three Months Ended
	September 30,
	2018 2017
Return on average assets (annualized)	0.89 % 0.81 %
Return on average equity (annualized)	8.59 % 8.00 %
Average equity to average assets	10.32% 10.10%
Non-interest income, excluding securities gains (losses), as a percentage of average assets (annualized)	0.79 % 0.82 %
Non-interest expense, excluding merger expenses, as a percentage of average assets (annualized)	3.10 % 2.97 %

The discussion that follows further explains changes in the components of net income when comparing the third quarter of 2018 with the third quarter of 2017.

#### **Net Interest Income:**

Net interest income, after the provision for loan losses, increased during the three months ended September 30, 2018 by \$591,000, or 13.0%, when compared to the three months ended September 30, 2017. Overall, average earning assets increased 4.7%, while average interest bearing liabilities increased 2.1%. Net interest margin, on a fully tax equivalent basis, increased from 3.56% during the three months ended September 30, 2017 to 3.67% during the three months ended September 30, 2018.

Average loan balances and interest on loans increased by \$30,694,000 and \$623,000, respectively, for the third quarter of 2018 compared to the same period in 2017. The increase in the average volume of loans outstanding and the 24 basis point increase in the weighted average yield on loans increased interest income by approximately \$378,000 and \$245,000, respectively.

Interest earned on investment securities increased \$4,000 in the third quarter of 2018 compared to the third quarter of 2017, while the average balance of investment securities declined by \$9,926,000, or 6.2%, during the period. The decline in the average balance decreased interest income by \$50,000, while the increase in the overall pre-tax yield of 15 basis points on the investment securities portfolio added \$54,000 to interest income.

Average earning assets increased \$25,571,000, to \$573,874,000, primarily due to the 7.9% increase in average loans. The yield on earning assets increased to 4.27% during the three months ended September 30, 2018 from 3.98% in the same period in 2017. The average balance of interest bearing liabilities and non-interest bearing liabilities increased over the period by \$8,948,000 and \$14,492,000, respectively, compared to the same 2017 period. In addition, the cost to fund interest bearing assets with interest bearing liabilities increased 17 basis points to 0.88% during the third quarter of 2018 compared to the same period in 2017.

The table below shows the net interest margin on a fully tax-equivalent basis for the three months ended September 30, 2018 and 2017.

Average Balance Sheets and Net Interest Income Analysis

(Dollars in thousands)	Three Months Ended September 30, 2018			Three Months Ended September 30, 2017					
	Average		Yield/	Average	verage Yield/		Increase (Decrease) Due To (6)		
	Balance (1)	Interest	Rate	Balance (1)	Interest	Rate	Volume	Rate	Total
ASSETS									
Interest earning assets:									
Taxable loans (5)	\$389,693	\$4,990	5.12 %	\$358,478	\$4,381	4.89 %	\$ 382	\$ 227	\$ 609
Tax-exempt loans	29,216	240	3.29	29,737	226	3.04	` /	18	14
Total loans	418,909	5,230	4.99	388,215	4,607	4.75	378	245	623
Taxable investment securities	129,999	748	2.30	135,104	729	2.16	(28	) 47	19
Tax-exempt investment securities	19,633	97	1.98	24,454	112	1.83	(22	7	(15)
Total investment securities	149,632	845	2.26	159,558	841	2.11	(50	) 54	4
Interest bearing deposits Federal funds sold Total interest earning assets	4,187 1,146 573,874	48 6 6,129	4.59 2.09 4.27	530 - 548,303	9 - 5,457	6.79 0.00 3.98	62 - 390	(23 6 282	) 39 6 672
Other assets (7) Total assets	51,326 \$625,200			49,289 \$597,592					
LIABILITIES AND STOCKHOLDERS' EQUITY Interest bearing liabilities:									
Interest bearing demand deposits (2)	\$149,889	288	0.77	\$126,149	114	0.36	\$ 22	\$ 152	\$ 174
Savings deposits Time deposits	104,342 153,463	26 525	0.10 1.37	100,323 140,859	26 421	0.10 1.20	1 38	(1 66	) - 104

Short-term and long-term borrowings and other interest bearing liabilities	24,238	111	1.83	55,653	191	1.37	(108	)	28	(80 )
Total interest bearing liabilities	431,932	950	0.88	422,984	752	0.71	(47	)	245	198
Non-interest bearing liabilities:										
Demand deposits	122,328			107,494						
Other	6,445			6,787						
Stockholders' equity	64,495			60,327						
Total liabilities and stockholders' equity	\$625,200			\$597,592						
Net interest income and net interest rate spread		\$5,179	3.39 %		\$4,705	3.27 %	\$ 437		\$ 37	\$ 474
Net interest margin on interest earning assets (3) Net interest income and net			3.61 %			3.43 %				
interest margin-Tax equivalent basis (4)		\$5,269	3.67 %		\$4,879	3.56 %				

#### Notes:

- 1) Average balances were calculated using a daily average.
- 2) Includes interest-bearing demand and money market accounts.
- 3) Net margin on interest earning assets is net interest income divided by average interest earning assets.
- 4) Interest on obligations of states and municipalities is not subject to federal income tax. In order to make the net yield comparable on a fully taxable basis, a tax equivalent adjustment is applied against the tax-exempt income utilizing a federal tax rate of 21% in 2018 and 34% in 2017.
- 5) Non-accruing loans are included in the above table until they are charged off.
- 6) The change in interest due to rate and volume has been allocated to volume and rate changes in proportion to the relationship of the absolute dollar amounts of the change in each.
- 7) Includes gross unrealized gains (losses) on securities available for sale.

#### **Provision for Loan Losses:**

In the third quarter of 2018, the provision for loan losses was \$32,000, compared to a provision of \$149,000 in the third quarter of 2017. Management regularly reviews the adequacy of the allowance for loan loss and makes assessments as to specific loan impairment, historical charge-off expectations, general economic conditions in the Bank's market area, specific loan quality and other factors. As compared to the third quarter of 2017, the level of loan loss provision in the third quarter of 2018 was most affected by a reduction in credit concentrations as a percentage of available capital due to the increase in capital from the Liverpool acquisition on April 30, 2018. See the earlier discussion in the Financial Condition section explaining the information used to determine the provision.

#### **Non-interest Income:**

Non-interest income in the third quarter of 2018 was \$1,241,000 compared to \$1,219,000 in the third quarter of 2017, representing an increase of \$22,000, or 1.8%.

Most significantly impacting the comparative three month periods were increases in debit card income of \$49,000 from improved debit card usage in the third quarter of 2018, an increase of \$39,000 in commissions from the sales of non-deposit products, and an increase of \$34,000 in customer service fee income compared to the third quarter of 2017. Partially offsetting these increases was a decline of \$66,000 in mortgage banking income due to a strategic shift in focus to a new mortgage product, which is increasing fees derived from loan activity, as well as a decline of \$49,000 in the income from unconsolidated subsidiary as no income was recorded in the third quarter of 2018 because Juniata no longer had an investment in Liverpool as its unconsolidated subsidiary as of April 30, 2018.

As a percentage of average assets, annualized non-interest income, exclusive of net gains on the sale of securities, was 0.79% in the third quarter of 2018 as compared to 0.82% in the third quarter of 2017.

#### **Non-interest Expense:**

Non-interest expense was \$5,032,000 for the three months ended September 30, 2018 versus \$4,442,000 for the same period in 2017, an increase of \$590,000.

The increase was primarily due to an increase of \$444,000 in employee compensation and benefits expense due to the addition of the LCB staff as well as a \$210,000 settlement expense related to a lump sum offering to terminated vested defined benefit participants in the third quarter of 2018. Merger and acquisition expense increased by \$185,000 in the third quarter of 2018, with no comparable expense recorded in the 2017 period. Partially offsetting these increases was a net gain on the sales of other real estate owned of \$71,000 as well as favorable variances in delinquent loan expense and electronic banking losses between the third quarter of 2018 and the third quarter of 2017.

As a percentage of average assets, annualized non-interest expense was 3.22% in the third quarter of 2018 compared to 2.97% in the third quarter of 2017. Excluding merger and acquisition expenses, annualized non-interest expense as a percentage of average assets was 3.10% in the third quarter of 2018.

#### **Provision for income taxes:**

An income tax benefit of \$29,000 was recorded in the third quarter of 2018, while an income tax provision expense of \$127,000 was recorded in the third quarter of 2017. The decline in the provision for income taxes resulted from the reduction in the federal income tax rate from 34% in 2017 to 21% in 2018. In addition, the Company qualifies for a federal tax credit for a low-income housing project investment, and the tax provisions for each period reflect the application of the tax credit. For the third quarters of 2018 and 2017, the tax credits were \$225,000 and \$198,000, respectively, offsetting \$196,000 in regular tax expense in the 2018 period and \$325,000 of regular tax expense in the 2017 period. For the third quarter of 2018, the tax credit lowered the effective tax rate from 14.5% to (2.1%) as compared to the same period in 2017, when the tax credit lowered the effective tax rate from 24.4% to 9.5%.

### Comparison of the Nine Months Ended September 30, 2018 and 2017

#### **Operations Overview:**

Net income for the first nine months of 2018 was \$4,281,000, an increase of \$322,000, or 8.1%, compared to the first nine months of 2017. Basic and diluted earnings per share were \$0.86 in the first nine months of 2018, representing an increase of 3.6% from the \$0.83 earned in the first nine months of 2017. Annualized return on average equity for the first nine months in 2018 was 9.28%, compared to 8.81% for the same period in the prior year, an increase of 5.3%. For the nine months ended September 30, annualized return on average assets was 0.93% in 2018, versus 0.89% in 2017. The comparability of the results of operations for the nine months ended September 30, 2018 and financial condition at September 30, 2018 were impacted by the aforementioned acquisition of Liverpool Community Bank on April 30, 2018. Further details are noted in the sections that follow.

Presented below are selected key ratios for the two periods:

	Nine Months
	Ended
	September 30,
	2018 2017
Return on average assets (annualized)	0.93 % 0.89 %
Return on average equity (annualized)	9.28 % 8.81 %
Average equity to average assets	10.03% 10.11%
Non-interest income, excluding securities gains (losses), as a percentage of average assets (annualized)	0.85 % 0.81 %
Non-interest expense, excluding merger expenses, as a percentage of average assets (annualized)	2.98 % 2.91 %

The discussion that follows explains changes in the components of net income when comparing the first nine months of 2018 with the first nine months of 2017.

#### **Net Interest Income:**

Net interest income, after the provision for loan losses, was \$14,647,000 for the nine months ended September 30, 2018, compared to \$13,509,000 in the same period in 2017, an increase of \$1,138,000, or 8.4%. Average earning assets increased by \$18,839,000, or 3.5%, while average interest bearing liabilities increased by \$5,965,000, or 1.4%.

On average, loans outstanding increased by \$21,036,000, or 5.5%, and interest on loans increased \$1,331,000, or 9.9%, in the nine months ended September 30, 2018 compared to the same period in 2017. A higher balance of loans and a 20 basis point increase in the weighted average yield on the loan portfolio increased interest income by \$787,000 and \$544,000, respectively.

Increases of \$119,000 and 18 basis points, respectively, in interest earned and the overall pre-tax yield on investment securities were recorded in the first nine months of 2018 compared to same period in 2017, even though average balances declined \$5,179,000 during the period.

Average interest bearing liabilities increased to \$425,477,000 from \$419,512,000, while average non-interest bearing deposits increased 12.0%, to \$119,956,000, during the nine months ended September 30, 2018 compared to the same 2017 period. The cost of interest bearing liabilities rose by 17 basis points as a result of three increases in the federal funds rate in the current period.

Total average earning assets during the first nine months of 2018 were \$563,805,000, compared to \$544,966,000 during the first nine months of 2017, yielding 4.14% and 3.91%, respectively. Interest bearing funding costs for earning assets were 0.83% and 0.66% for the first nine months of 2018 and 2017, respectively. Net interest margin on a fully tax-equivalent basis for the first nine months of 2018 was 3.58%. For the same period in 2017, the fully-tax equivalent net interest margin was 3.53%.

The table below shows the net interest margin on a fully tax-equivalent basis for the nine months ended September 30, 2018 and 2017.

Average Balance Sheets and Net Interest Income Analysis

(Dollars in thousands)	Nine Mon September			Nine Mon September			T	(D		\ D	
	Average		Yield/	Average		Yield/	Increase (Decrease) Due To (6)				
	Balance (1)	Interest	Rate	Balance (1)	Interest	Rate	Volume	e Ra	ate	Total	
ASSETS Interest earning assets: Taxable loans (5)	\$377,875	\$14,134		\$354,753	\$12,798	4.81 %			502	\$ 1,33	
Tax-exempt loans Total loans	28,784 406,659	688 14,822	3.19 4.86	30,870 385,623	693 13,491	2.99 4.66	(47 787	/	42 544	(5 1,33	)
Taxable investment securities	133,291	2,288	2.29	133,694	2,128	2.12	(6	)	166	160	
Tax-exempt investment securities	20,317	299	1.96	25,093	340	1.81	`	_	24	(41	)
Total investment securities	153,608	2,587	2.25	158,787	2,468	2.07	(71	)	190	119	
Interest bearing deposits Federal funds sold	2,605 933	90 13	4.61 1.86	556 -	20	4.80 0.00	74 -		(4 ) 13	70 13	
Total interest earning assets	563,805	17,512	4.14	544,966	15,979	3.91	790	,	743	1,53	3
Other assets (7) Total assets	49,619 \$613,424			47,949 \$592,915							
LIABILITIES AND STOCKHOLDERS' EQUITY											
Interest bearing liabilities: Interest bearing demand deposits (2)	\$138,965	666	0.64	\$123,580	281	0.30	\$ 35	\$ :	350	\$ 385	
Savings deposits Time deposits Short-term and long-term	102,625 147,700	76 1,436	0.10 1.30	99,502 139,343	74 1,200	0.10 1.15	2 72		- 164	2 236	
borrowings and other interest bearing liabilities	36,187	456	1.68	57,087	526	1.23	(192	)	122	(70	)
Total interest bearing liabilities	425,477	2,634	0.83	419,512	2,081	0.66	(83	)	636	553	

Non-interest bearing liabilities:								
Demand deposits	119,956			107,136				
Other	6,468			6,340				
Stockholders' equity	61,523			59,927				
Total liabilities and stockholders' equity	\$613,424			\$592,915				
Net interest income and net interest rate spread		\$14,878	3.31 %		\$13,898	3.25 % \$ 873	\$ 107	\$ 980
Net interest margin on interest earning assets (3)			3.52 %			3.40 %		
Net interest income and net								
interest margin-Tax equivalent basis (4)		\$15,140	3.58 %		\$14,430	3.53 %		

#### Notes:

- 1) Average balances were calculated using a daily average.
- 2) Includes interest-bearing demand and money market accounts.
- 3) Net margin on interest earning assets is net interest income divided by average interest earning assets.
- 4) Interest on obligations of states and municipalities is not subject to federal income tax. In order to make the net yield comparable on a fully taxable basis, a tax equivalent adjustment is applied against the tax-exempt income utilizing a federal tax rate of 21% in 2018 and 34% in 2017.
- 5) Non-accruing loans are included in the above table until they are charged off.
- 6) The change in interest due to rate and volume has been allocated to volume and rate changes in proportion to the relationship of the absolute dollar amounts of the change in each.
- 7) Includes gross unrealized gains (losses) on securities available for sale.

#### **Provision for Loan Losses:**

In the first nine months of 2018, the provision for loan losses was \$231,000 compared to a provision of \$389,000 in the first nine months of 2017. Management regularly reviews the adequacy of the loan loss reserve and makes assessments as to specific loan impairment, historical charge-off expectations, general economic conditions in the Bank's market area, specific loan quality and other factors. See the earlier discussion in the Financial Condition section, explaining the information used to determine the provision.

#### **Non-interest Income:**

Non-interest income in the first nine months of 2018 was \$3,911,000, a decrease of \$180,000, or 4.4%, compared to \$4,091,000 in the first nine months of 2017.

Most significantly impacting non-interest income comparisons between the two periods were gains from the sales of securities. In 2017, a tax strategy was executed, resulting in net securities gains of \$510,000 in the nine months ended September 30, 2017, while securities sold in the nine months ended September 30, 2018 resulted in a net loss of \$15,000. Also significantly impacting non-interest income in the nine months ended September 30, 2018 was a \$142,000 increase in the income/gain from unconsolidated subsidiary compared to the same 2017 period due to an adjustment to the carrying value of Juniata's previous 39.16% ownership of Liverpool at April 30, 2018, which resulted in a net gain of \$215,000, offset by the discontinuance of income in this category after April 30, 2018.

Debit card income and fees derived from loan activity increased by 14.0% and 45.3%, respectively, in the first nine months of 2018 versus the first nine months of 2017, as did commissions from sales of non-deposit products, which increased \$62,000, or 44.3%. Offsetting these increases was a decline of \$117,000 in mortgage banking income in the nine months ended September 30, 2018 compared to the nine months ended September 30, 2017 due to a strategic shift in focus to a new mortgage product, which is increasing fees derived from loan activity.

As a percentage of average assets, annualized non-interest income, exclusive of net gains/losses on the sale of securities, was 0.85% in the first nine months of 2018 and 0.81% in the first nine months of 2017.

#### **Non-interest Expense:**

Total non-interest expense was \$14,343,000 for the first nine months of 2018, \$1,403,000, or 10.8%, greater than in the first nine months of 2017.

Merger-related expenses of \$625,000, related to the Liverpool acquisition, were recorded in the nine months ended September 30, 2018 while no such expense was incurred in the 2017 period. Employee compensation and benefits expense increased \$524,000 during the nine months ended September 30, 2018 compared to the same period in 2017, primarily due to the addition of the Liverpool staff in 2018. Also impacting compensation and benefits expense was settlement expense of \$210,000 related to a lump sum offering to terminated vested defined benefit participants. Occupancy and equipment expense increased \$143,000 due to the completion and occupation of a relocated banking office at the end of 2017. In addition, the amortization expense for the investment in low-income housing partnerships increased \$188,000 due to the additional investment in phase II of a tax credit investment, with no similar expense recorded in the first half of 2017.

As a percentage of average assets, annualized non-interest expense was 3.12% in the nine months ended September 30, 2018 compared to 2.91% in the nine months ended September 30, 2017. Excluding merger and acquisition expenses, annualized non-interest expense as a percentage of average assets was 2.98% in the nine months ended September 30, 2018.

#### **Provision for income taxes:**

An income tax benefit of \$66,000 was recorded in the first nine months of 2018 compared to an expense of \$701,000 in the first nine months of 2017. As mentioned previously, the federal income tax rate declined from 34% in 2017 to 21% in 2018, resulting in a decline in the provision for income taxes in the 2018 period compared to the same period in 2017. Also contributing to the resulting income tax benefit was lower taxable income in the 2018 period compared to the 2017 period.

In addition, the Company qualifies for a federal tax credit for its low-income housing project investment, and the tax provisions for each period reflect the application of the tax credit. The tax credit recorded in the first nine months periods of 2018 and 2017 was \$676,000 and \$484,000, respectively, offsetting \$610,000 in regular tax expense in the 2018 period and \$1,185,000 of regular tax expense in the 2017 period. For the first nine months of 2018, the tax credit lowered the effective tax rate from 14.5% to (1.6%) as compared to the same period in 2017, when the tax credit lowered the effective tax rate from 25.4% to 15.0%.

#### Liquidity:

The objective of liquidity management is to ensure that sufficient funding is available, at a reasonable cost, to meet the ongoing operational cash needs of the Company and to take advantage of income producing opportunities as they arise. While the desired level of liquidity will vary depending upon a variety of factors, it is the primary goal of the Company to maintain a high level of liquidity in all economic environments. Principal sources of asset liquidity are provided by loans and securities maturing in one year or less, and other short-term investments, such as federal funds sold and cash and due from banks. Liability liquidity, which is more difficult to measure, can be met by attracting deposits and maintaining the core deposit base. The Company is a member of the Federal Home Loan Bank of Pittsburgh for the purpose of providing short-term liquidity when other sources are unable to fill these needs. During the nine months ended September 30, 2018, overnight borrowings from the Federal Home Loan Bank averaged \$11,906,000. As of September 30, 2018, the Company had short-term borrowings and long-term debt with the Federal Home Loan Bank of \$593,000 and \$15,000,000, respectively, and had remaining unused borrowing capacity with the Federal Home Loan Bank of \$172,662,000.

Funding derived from securities sold under agreements to repurchase (accounted for as collateralized financing transactions) is available through corporate cash management accounts for business customers. This product gives the Company the ability to pay interest on corporate checking accounts.

In view of the sources previously mentioned, management believes that the Company's liquidity is capable of providing the funds needed to meet operational cash needs.

### **Off-Balance Sheet Arrangements:**

The Company's consolidated financial statements do not reflect various off-balance sheet arrangements that are made in the normal course of business, which may involve some liquidity risk, credit risk, and interest rate risk. These commitments consist mainly of loans approved but not yet funded, unused lines of credit and outstanding letters of credit. Letters of credit are conditional commitments issued by the Company to guarantee the performance of a

customer to a third-party. Generally, financial and performance letters of credit have expiration dates within one year of issuance, while commercial letters of credit have longer term commitments. The credit risk involved in issuing letters of credit is essentially the same as the risks that are involved in extending loan facilities to customers. The Company generally holds collateral and/or personal guarantees supporting these commitments. The Company had \$3,027,000 and \$2,541,000 of financial and performance letters of credit commitments outstanding as of September 30, 2018 and December 31, 2017, respectively. Commercial letters of credit as of September 30, 2018 and December 31, 2017 totaled \$11,983,000 and \$12,650,000, respectively. Management believes that the proceeds obtained through a liquidation of collateral and the enforcement of guarantees would be sufficient to cover the potential amount of future payments required under the corresponding guarantees. The current amount of the liability as of September 30, 2018 for payments under letters of credit issued was not material. Because these instruments have fixed maturity dates, and because many of them will expire without being drawn upon, they do not generally present any significant liquidity risk.

Additionally, the Company has sold qualifying residential mortgage loans to the FHLB as part of its Mortgage Partnership Finance Program ("Program"). Under the terms of the Program, there is limited recourse back to the Company for loans that do not perform in accordance with the terms of the loan agreement. Each loan sold under the Program is "credit enhanced" such that the individual loan's rating is raised to "BBB", as determined by the FHLB. The Program can be terminated by either the FHLB or the Company, without cause. The FHLB has no obligation to commit to purchase any mortgage through, or from, the Company.

#### **Interest Rate Sensitivity:**

Interest rate sensitivity management is overseen by the Asset/Liability Management Committee. This process involves the development and implementation of strategies to maximize net interest margin, while minimizing the earnings risk associated with changing interest rates. Traditional gap analysis identifies the maturity and re-pricing terms of all assets and liabilities. A simulation analysis is used to assess earnings and capital at risk from movements in interest rates. See Item 3 for a description of the complete simulation process and results.

#### **Capital Adequacy:**

Bank regulatory authorities in the United States issue risk-based capital standards. These capital standards relate a banking company's capital to the risk profile of its assets and provide the basis by which all banking companies and banks are evaluated in terms of capital adequacy. Effective January 1, 2015, the risk-based capital rules were modified subject to a transition period for several aspects of the final rules, including the new minimum capital ratio requirements, the capital conservation buffer and the regulatory capital adjustments and deductions. The new framework is commonly called "BASEL III". The final rules revised federal regulatory agencies' risk-based and leverage capital requirements and their method for calculating risk-weighted assets to make them consistent with the Basel III framework. The final rules apply to all depository institutions, top-tier bank holding companies with total consolidated assets of \$500 million or more, and top-tier savings and loan holding companies ("banking organizations"). Among other things, the rules established a new common equity tier 1 (CET1) minimum capital requirement (4.5% of risk-weighted assets) and a higher minimum tier 1 capital requirement (from 4.0% to 6.0% of risk-weighted assets), and assign higher risk weightings (150%) to exposures that are more than 90 days past due or are on nonaccrual status and certain commercial real estate facilities that finance the acquisition, development or construction of real property.

Basel III requires financial institutions to maintain: (a) a minimum ratio of CET1 to risk-weighted assets of at least 4.5%, (b) a minimum ratio of tier 1 capital to risk-weighted assets of at least 6.0%,; (c) a minimum ratio of total (that is, tier 1 plus tier 2) capital to risk-weighted assets of at least 8.0%, ); and (d) a minimum leverage ratio of 3.0%, calculated as the ratio of tier 1 capital balance sheet exposures plus certain off-balance sheet exposures (computed as the average for each quarter of the month-end ratios for the quarter). In addition, the rules also limit a banking organization's capital distributions and certain discretionary bonus payments if the banking organization does not hold a "capital conservation buffer" of 2.5% above the minimum standards stated in (a) - (c) above.

According to the rules, CET1 is comprised of common stock plus related surplus, net of treasury stock and other contra-equity components, retained earnings and accumulated other comprehensive income. However, certain banking institutions, including the Bank, were permitted to make a one-time election to opt out of the requirement to include most components of AOCI in CET1. This opt-out option was available only until March 31, 2015. The Bank elected to opt-out.

At September 30, 2018, the Bank exceeded the regulatory requirements to be considered a "well capitalized" financial institution under the new rules. The Bank's CET1 and Tier 1 Capital ratio was 14.11%, its Total Capital ratio was 14.83% and its Tier 1 leverage was 9.67%. On a consolidated basis, the Company's CET1 and Tier 1 Capital ratio was 14.38%, and Total Capital ratio and Tier 1 leverage ratio was 15.10% and 9.84%, respectively. Thus, the Company and the Bank also maintain capital sufficient to cover the additional 2.5% capital conservation buffer.

### Item 3. Quantitative and Qualitative Disclosures About Market Risk

Market risk is the exposure to economic loss that arises from changes in the values of certain financial instruments. The types of market risk exposures generally faced by financial institutions include equity market price risk, interest rate risk, foreign currency risk and commodity price risk. Due to the nature of its operations, only equity market price risk and interest rate risk are significant to the Company.

Equity market price risk is the risk that changes in the values of equity investments could have a material impact on the financial position or results of operations of the Company. The Company's equity investments consist of common stocks of publicly traded financial institutions.

There can be volatility in the values of financial institution stocks, but the primary objective of the portfolio is to achieve value appreciation in the long term while earning consistently attractive after-tax yields from dividends. The carrying value of the financial institutions' stocks accounted for 0.2% of the Company's total assets as of September 30, 2018.

The equity investments in the Company's portfolio had a fair value of \$1,162,000 at September 30, 2018. Net unrealized losses of \$4,000 and unrealized gains of \$42,000 in this portfolio were recorded on the consolidated statements of income for the three and nine months ended September 30, 2018, respectively.

In addition to its equity portfolio, the Company's investment management and trust services revenue could be impacted by fluctuations in the securities markets. A portion of the Company's trust revenue is based on the value of the underlying investment portfolios. If securities values decline, the Company's trust revenue could be negatively impacted.

Interest rate risk creates exposure in two primary areas. First, changes in rates have an impact on the Company's liquidity position and could affect its ability to meet obligations and continue to grow. Second, movements in interest rates can create fluctuations in the Company's net interest income and changes in the economic value of equity.

The primary objective of the Company's asset-liability management process is to maximize current and future net interest income within acceptable levels of interest rate risk while satisfying liquidity and capital requirements. Management recognizes that a certain amount of interest rate risk is inherent, appropriate and necessary to ensure profitability. A simulation analysis is used to assess earnings and capital at risk from movements in interest rates. The model considers three major factors: (1) volume differences; (2) repricing differences; and (3) timing in its income simulation. As of the most recent model run, data was disseminated into appropriate repricing buckets, based upon the static position at that time. The interest-earning assets and interest-bearing liabilities were assigned a multiplier to simulate how much that particular balance sheet item would re-price when interest rates change. Finally, the estimated timing effect of rate changes was applied, and the net interest income effect was determined on a static basis (as if no other factors were present). As the table below indicates, based upon rate shock simulations on a static basis over a one-year period, the net effect of an immediate 100, 200, 300 and 400 basis point rate increase would change net interest income by (\$212,000), (\$444,000), (\$885,000) and (\$1,637,000), respectively. The net effect of an immediate 100, 200, 300, and 400 basis point rate decline would change net interest income by (\$415,000), (\$1,031,000), (\$1,256,000), and (\$1,381,000), respectively.

#### **Effect of Interest Rate Risk on Net Interest Income**

#### (Dollars in thousands)

<b>Change in Interest Rates (Basis Points)</b>	<b>Total Change in Net Interest Income</b>	
400	\$(1,637	)
300	(885	)
200	(444	)
100	(212	)
0	-	
(100)	(415	)
(200)	(1,031	)
(300)	(1,256	)
(400)	(1,381	)

The Company's rate risk policies provide for maximum limits on net interest income that can be at risk for 100 through 400 basis point changes in interest rates. The net interest income at risk position remained within the guidelines established by the Company's asset/liability policy.

No material change has been noted in the Bank's equity value at risk. Please refer to the Annual Report on Form 10-K as of December 31, 2017 for further discussion of this topic.

#### **Item 4. Controls and Procedures**

#### **Disclosure Controls and Procedures**

As of September 30, 2018, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined by the Securities Exchange Act of 1934 ("Exchange Act"), Rule 13a-15(e). Disclosure controls and procedures are controls and procedures that are designed to ensure that information required to be disclosed in Company reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. These controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Based upon that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of the end of the period covered by this quarterly report.

It should be noted that any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events. Because of these and other inherent limitations of control systems, there can be no assurance that any design will succeed in achieving its stated goals under all potential conditions, regardless of how remote.

Attached as Exhibits 31 and 32 to this quarterly report are certifications of the Chief Executive Officer and the Chief Financial Officer required by Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act. This portion of the Company's quarterly report includes the information concerning the controls evaluation referred to in the certifications and should be read in conjunction with the certifications for a more complete understanding of the topics presented.

### **Changes in Internal Control Over Financial Reporting**

There were no significant changes in the Company's internal control over financial reporting during the fiscal quarter ended September 30, 2018, that has materially affected, or is reasonably likely to materially affect, the internal controls over financial reporting.

### **PART II - OTHER INFORMATION**

Item 1.

#### **LEGAL PROCEEDINGS**

In the opinion of management of the Company, there are no legal or governmental proceedings pending to which the Company or its subsidiary is a party or to which its property is subject, which, if determined adversely to the Company or its subsidiary, would be material in relation to the Company's or its subsidiary's financial condition. There are no proceedings pending other than ordinary routine litigation incident to the business of the Company or its subsidiary. In addition, no material proceedings are pending or are known to be threatened or contemplated against the Company or its subsidiary by government authorities.

#### Item 1A. RISK FACTORS

There have been no material changes to the risk factors that were disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

### Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The Company has an active share repurchase program in place, to which there is no expiration date. As of November 9, 2018, the number of shares that may yet be purchased under the program was 172,062. Transactions pursuant to the repurchase program in the three month period ended September 30, 2018 are shown below.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (1)
July 1-31, 2018 August 1-31, 2018 September 1-30, 2018	- - -	\$ - - -	- - -	172,062 172,062 172,062
Totals	-		-	172,062

No repurchase plan or program expired during the quarter. The Company has no stock repurchase plan or program that it has determined to terminate prior to expiration or under which it does not intend to make further purchases.

Certain regulatory restrictions exist regarding the ability of the Bank to transfer funds to the Company in the form of cash dividends, loans or advances. At September 30, 2018, \$34,156,000 of undistributed earnings of the Bank, included in the consolidated stockholders' equity, was available for distribution to the Company as dividends without prior regulatory approval, subject to regulatory capital requirements.

Item 3.	DEFAULTS UPON SENIOR SECURITIES	
Not app	licable	
	Item 4.	MINE SAFETY DISCLOSURES
Not app	licable	
	Item 5.	OTHER INFORMATION
None		
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Item 6. EXHIBITS

- 3.1 Amended and Restated Articles of Incorporation (incorporated by reference to Exhibit 3 (I) to the Company's Form 8-K Current Report filed with the SEC on November 12, 2015)
- 3.2 Bylaws (incorporated by reference to Exhibit 3.2 to the Company's report on Form 8-K filed with the SEC on December 21, 2007)
- 3.3 Bylaw Amendment (incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on February 28, 2012)
- 31.1 Rule 13a 14(a)/15d 14(a) Certification of President and Chief Executive Officer
- 31.2 Rule 13a 14(a)/15d 14(a) Certification of Chief Financial Officer
- 32.1 Section 1350 Certification of President and Chief Executive Officer
- 32.2 Section 1350 Certification of Chief Financial Officer
- 101.LAB XBRL Taxonomy Extension Label Linkbase
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase
- 101.INS XBRL Instance Document
- 101.SCH XBRL Taxonomy Extension Schema
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase
- 101.DEF XBRL Taxonomy Extension Definition Linkbase

Pursuant to the requirements 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.

Juniata Valley Financial Corp. (Registrant)

Date: November 9, 2018 By:/s/ Marcie A. Barber

Marcie A. Barber, President Chief Executive Officer (Principal Executive Officer)

Date: November 9, 2018 By:/s/ JoAnn N. McMinn

JoAnn N. McMinn Chief Financial Officer

(Principal Accounting Officer and Principal Financial Officer)