

MIDDLEFIELD BANC CORP
Form S-4/A
November 18, 2016
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As filed with the Securities and Exchange Commission on November 18, 2016

Registration No. 333-213889

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Amendment No. 1 of
FORM S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

MIDDLEFIELD BANC CORP.

(Exact name of Registrant as Specified in its Charter)

Ohio
(State or other Jurisdiction of
Incorporation or Organization)

6712
(Primary Standard Industrial
Classification Code Number)

34-1585111
(IRS Employer
Identification Number)

Edgar Filing: MIDDLEFIELD BANC CORP - Form S-4/A

15985 East High Street

Middlefield, Ohio 44062-0035

(440) 632-1666

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

James R. Heslop, II

15985 East High Street

Middlefield, Ohio 44062-0035

(440) 632-1666

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for service of process)

with copies to:

Francis X. Grady, Esq.

Grady & Associates

20220 Center Ridge Road, Suite 300

Rocky River, Ohio 44116-3501

(440) 356-7255

M. Patricia Oliver, Esq.

Tucker Ellis LLP

950 Main Avenue, Suite 1100

Cleveland, Ohio 44113

(216) 696-4149

Approximate date of commencement of proposed sale of the securities to the public: as soon as practicable after this registration statement becomes effective.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier registration statement for the same offering.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (do not check if a smaller reporting company)

Smaller reporting company

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus and proxy statement shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

PRELIMINARY SUBJECT TO COMPLETION DATED NOVEMBER 18, 2016

MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT

Proxy Statement and Prospectus of

Middlefield Banc Corp.

MERGER PROPOSAL YOUR VOTE IS VERY IMPORTANT

Proxy Statement of

Liberty Bank, N.A.

Middlefield Banc Corp. (Middlefield) and Liberty Bank, N.A. (Liberty) entered into an Agreement and Plan of Reorganization on July 28, 2016. We refer to the agreement as the Reorganization Agreement. A copy is attached to this joint proxy statement/prospectus as Annex A. The Reorganization Agreement provides that Liberty will merge into The Middlefield Banking Company, which is Middlefield's bank subsidiary. The merger is subject to a number of conditions, including but not limited to obtaining approval of Middlefield stockholders and approval of Liberty stockholders.

Approximately 45% of the Liberty shares of common stock exchanged in the merger will be exchanged for Middlefield common stock, and the remaining Liberty shares of common stock exchanged in the merger (approximately 55%) will be exchanged for cash. Each share of Liberty common stock not owned by Middlefield will be converted at the effective time of the merger into the right to receive either: (x) \$37.96 in cash or (y) 1.1934 shares of Middlefield common stock, subject to allocation procedures to ensure that approximately 45% of the outstanding shares of Liberty common stock are converted into Middlefield common stock and the remaining Liberty common stock is converted into cash. Excluding the 23,218 Liberty shares owned by Middlefield, which will be cancelled in the merger without consideration, the aggregate consideration payable to Liberty stockholders is approximately \$20.8 million in cash and approximately 557,079 shares of Middlefield common stock. On July 27, 2016, the day before execution of the Reorganization Agreement, the per share closing price of Middlefield common stock on the Nasdaq Capital Market was \$33.74. At that price the stock portion of the merger consideration would have a value of approximately \$18.8 million, and combined with the approximately \$20.8 million cash payable for 55% of Liberty common stock, the total merger consideration would be \$39.6 million, before the special dividend discussed below. Because the 1.1934 exchange ratio is fixed, the value of the stock portion of the total merger consideration will fluctuate with changes in the price of Middlefield stock. Holders of Liberty stock options and phantom shares also will receive cash for cancellation of those interests. Finally, in addition to the cash and stock merger consideration, Liberty

stockholders will receive a special dividend of approximately \$3.0 million in the aggregate, or \$3.13 per share, before merger closing. Middlefield will receive no merger consideration for its 23,218 Liberty shares but it will be entitled to a proportionate share of the special dividend payment. See *SUMMARY What Liberty stockholders will receive in the Merger*.

Middlefield will not issue fractional shares. A holder of Liberty common stock who would otherwise be entitled to a fractional share will instead receive cash, without interest, equal to the product of the fractional share to which the holder would otherwise be entitled multiplied by the volume-weighted average closing sale price of Middlefield common stock for the 30 trading days immediately before the effective time.

Middlefield and Liberty will each hold a meeting of stockholders to vote on adoption and approval of the Reorganization Agreement. The meeting of Middlefield's stockholders will be held at: 10:00 a.m. local time on January 10, 2017 at Middlefield, Ohio. The meeting of Liberty's stockholders will be held at: 9:00 a.m. local time on December 22, 2016 at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio. At these meetings stockholders will be asked to approve and adopt the Reorganization Agreement and the merger transaction. Stockholders will also be asked to approve adjournment of the meeting, if adjournment is necessary to allow Middlefield or Liberty time to solicit additional proxies in favor of the Reorganization Agreement and the merger transaction. Liberty's stockholder meeting is an annual meeting, so Liberty stockholders will also be asked to act upon routine annual meeting proposals, including election of directors and ratification of the appointment of independent auditors.

This document is a proxy statement of both Middlefield and Liberty. It is also a prospectus for Middlefield's issuance of common stock in the merger. This joint proxy statement/prospectus describes Middlefield's special meeting, Liberty's annual meeting, and the merger proposal.

The board of directors of Middlefield and the board of directors of Liberty approved the Reorganization Agreement and the merger transaction. They recommend that their stockholders vote FOR adoption and approval of the Reorganization Agreement and FOR adjournment of the meeting if adjournment is necessary.

Middlefield's common stock trades on the Nasdaq Capital Market under the symbol MBCN. On July 27, 2016, the day before execution of the Reorganization Agreement, the closing price of Middlefield common stock was \$33.74 per share. On _____, 2016 the closing price of Middlefield common stock was \$ _____ per share. Liberty common stock is privately held, not listed on a stock exchange, and not traded in the over-the-counter market.

You are encouraged to read this document carefully, including the materials incorporated by reference into this document. In particular, you should read the Risk Factors section beginning on page 28 for a discussion of the risks related to the merger and the risks of owning Middlefield common stock.

Regardless of whether you plan to attend your company's stockholder meeting, you are urged to vote by completing, signing, and returning the enclosed proxy card in the enclosed postage-paid envelope.

If you are a Liberty stockholder as of the November 25, 2016 record date but your shares are not voted in favor of adoption and approval of the Reorganization Agreement, you have the right to demand the fair cash value for your Liberty common stock but to do so you must adhere to the specific requirements of the National Bank Act, 12 U.S.C. §215, paragraphs (b), (c), and (d). See *DISSENTERS RIGHTS* on page 48 of this joint proxy statement/prospectus and the complete text of the National Bank Act dissenters' rights provision attached to this joint proxy statement/prospectus as Annex B. Holders of Middlefield common stock do not have dissenters' rights.

Not voting in person or by proxy or at the stockholder meeting will have the same effect as voting against adoption and approval of the Reorganization Agreement. We urge you to read carefully this joint proxy statement/prospectus, which contains a detailed description of your company's stockholder meeting, the merger proposal, and Middlefield common stock to be issued in the merger.

Sincerely,

Thomas G. Caldwell

President and Chief Executive Officer

Middlefield Banc Corp.

Sincerely,

William A. Valerian

Chairman, President and Chief Executive Officer

Liberty Bank, N.A.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of Middlefield common stock to be issued in the merger. Neither the Securities and Exchange Commission nor any state securities commission has determined whether this joint proxy statement/prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The securities to be issued in the merger described in this joint proxy statement/prospectus are not savings accounts, deposit accounts, or other obligations of a bank or savings association and are not insured by the Federal Deposit Insurance Corporation, the Deposit Insurance Fund, or any other federal or state governmental agency.

This joint proxy statement/prospectus is dated _____, 2016 and it is first being mailed to Middlefield Banc Corp. stockholders and Liberty Bank, N.A. stockholders on or about _____, 2016.

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NOTICE OF ANNUAL MEETING

To the Stockholders of Liberty Bank, N.A.:

Liberty Bank, N.A.'s Annual Meeting will be held on December 22, 2016 at 9:00 a.m. Eastern Time at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio 44128. The meeting is for the purpose of considering and acting upon proposals to:

1. adopt and approve the July 28, 2016 Agreement and Plan of Reorganization entered into by Middlefield Banc Corp., The Middlefield Banking Company, and Liberty Bank, N.A. and approve the transactions contemplated thereby,
2. adjourn the annual meeting if adjournment is necessary to allow solicitation of additional proxies because of insufficient votes to adopt and approve the Agreement and Plan of Reorganization and approve the transactions contemplated thereby,
3. elect twelve directors to serve until the earlier of (i) completion of the Merger or (ii) Liberty Bank's 2017 Annual Meeting and until their successors are elected and qualified,
4. ratify the appointment of Maloney + Novotny LLC as independent public accountants for the fiscal year ending December 31, 2016, and
5. transact any other business properly presented at the Meeting or at any adjournment.

Record holders of Liberty's common stock at the close of business on November 25, 2016 are entitled to receive notice of and to vote at the meeting and any adjournment or postponement. The affirmative vote of the holders of at least two-thirds of Liberty's outstanding common stock is required for adoption and approval of the Agreement and Plan of Reorganization and approval of the transactions contemplated thereby.

A joint proxy statement/prospectus and proxy card for the meeting are enclosed. A copy of the Agreement and Plan of Reorganization is attached as Annex A to the joint proxy statement/prospectus.

Your vote is very important regardless of the number of shares you own. Please vote as soon as possible to make sure that your shares are represented at the meeting. If you are a holder of record, you may cast your vote in person at the meeting or, to ensure that your shares are represented at the meeting, you may vote your shares by completing, signing, and returning the enclosed proxy card. If your shares are held in a stock brokerage account or by a bank or other nominee (in street name), please follow the voting instructions of your broker, bank, or nominee.

The Liberty board of directors recommends that you vote (1) FOR adoption and approval of the Agreement and Plan of Reorganization, (2) FOR adjournment of the meeting, (3) FOR election of the identified director nominees, and (4) FOR ratification of the selection of independent auditors.

By order of the Board of Directors,

William A. Valerian

Chairman of the Board, President &

Chief Executive Officer

Beachwood, Ohio
, 2016

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NOTICE OF SPECIAL MEETING

To the Stockholders of Middlefield Banc Corp.:

Middlefield Banc Corp.'s Special Meeting will be held on January 10, 2017 at 10:00 a.m. Eastern Time at The Middlefield Banking Company, 15985 East High Street, Middlefield, Ohio 44062. The meeting is for the purpose of considering and acting upon proposals to:

- 1) approve the transactions under the July 28, 2016 Agreement and Plan of Reorganization entered into by Middlefield Banc Corp., The Middlefield Banking Company, and Liberty Bank, N.A.,
- 2) approve issuance of up to 563,261 shares of Middlefield common stock in the merger,
- 3) adjourn the special meeting if adjournment is necessary to allow solicitation of additional proxies if there are insufficient votes to adopt and approve the Agreement and Plan of Reorganization, and
- 4) transact any other business properly presented at the Meeting or at any adjournment.

Record holders of Middlefield's common stock at the close of business on November 17, 2016 are entitled to vote at the meeting and any adjournment or postponement. The affirmative vote of the holders of at least two-thirds of Middlefield's outstanding common stock is required for adoption and approval of the Agreement and Plan of Reorganization.

A joint proxy statement/prospectus and proxy card for the meeting are enclosed. A copy of the Agreement and Plan of Reorganization is attached as Annex A to the joint proxy statement/prospectus.

Your vote is very important regardless of the number of shares you own. Please vote as soon as possible to make sure that your shares are represented at the meeting. If you are a holder of record, you may cast your vote in person at the meeting or, to ensure that your shares are represented at the meeting, you may vote your shares by completing, signing, and returning the enclosed proxy card. If your shares are held in a stock brokerage account or by a bank or other nominee (in street name), please follow the voting instructions of your broker, bank, or nominee.

The Middlefield board of directors recommends that you vote (1) FOR the Agreement and Plan of Reorganization, (2) FOR issuance of Middlefield common stock in the merger, and (3) FOR adjournment of the meeting.

By order of the Board of Directors,

Kathleen M. Johnson
Secretary

Middlefield, Ohio
, 2016

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WHERE YOU CAN FIND MORE INFORMATION

Middlefield is a publicly traded company filing annual, quarterly, and other reports, proxy statements, and other business and financial information with the Securities and Exchange Commission (SEC). You may read and obtain copies of these documents at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. Please call the SEC at (800) SEC-0330 for additional information about the public reference room. Middlefield files its annual, quarterly, and other reports, proxy statements, and other business and financial information with the SEC electronically. The SEC maintains a web site located at www.sec.gov containing this information. Information filed by Middlefield with the SEC is also available without charge through Middlefield's website at www.middlefieldbank.com under the Investor Relations tab.

Middlefield filed with the SEC a registration statement on Form S-4 to register the issuance of common stock to Liberty stockholders in the merger. This joint proxy statement/prospectus is part of that Form S-4 registration statement. As permitted by SEC rules, this document does not contain all of the information included in the registration statement or in the exhibits or schedules to the registration statement. You may read and request a copy of the registration statement, including any amendments, schedules, and exhibits at the address given below. Statements contained in this document regarding the contents of any contract or other document filed as an exhibit to the registration statement are not necessarily complete. In each case you should refer to the contract or other document filed as an exhibit. These documents are available without charge to you upon written or oral request at the following address and telephone number:

Middlefield Banc Corp.

15985 East High Street

P.O. Box 35

Middlefield, Ohio 44062-0035

Attention: Investor Relations

(440) 632-1666

To obtain timely delivery of these documents, you must request the information no later than January 3, 2017 to receive them before the Middlefield special meeting and no later than December 15, 2016 to receive them before the Liberty annual meeting.

Liberty is privately-held and does not file reports with the SEC.

Neither Middlefield nor Liberty has authorized anyone to provide you with information other than the information included in this document and any documents incorporated by reference. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information in this document and any documents incorporated by reference are accurate only as of their respective dates. Each of Middlefield's and Liberty's business, financial condition, results of operations, and prospects could have changed since those dates.

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QUESTIONS AND ANSWERS ABOUT THE MERGER AND THE STOCKHOLDER MEETINGS

The following questions and answers cover some of the questions most likely to arise about the stockholder meetings. We urge you to read carefully the remainder of this joint proxy statement/prospectus, including the annexes, because this section does not necessarily contain all information that is important to you.

Q: Why am I receiving this joint proxy statement/prospectus?

A: You are receiving this joint proxy statement/prospectus because Liberty Bank, N.A. (Liberty) agreed to merge into The Middlefield Banking Company by the terms of a July 28, 2016 Agreement and Plan of Reorganization (the Reorganization Agreement) entered into by Liberty, Middlefield Banc Corp. (Middlefield), and The Middlefield Banking Company, and to be executed by MBC Interim Bank, an interim state-chartered commercial bank to be incorporated under the laws of the state of Ohio (MBC Interim Bank). The Middlefield Banking Company is and will remain a wholly owned subsidiary of Middlefield. Pursuant to the Reorganization Agreement, Liberty and MBC Interim Bank will merge with and into Liberty with Liberty surviving that merger (the Interim Merger), and immediately thereafter Liberty will merge with and into The Middlefield Banking Company with The Middlefield Banking Company surviving that merger (the Bank Merger, and considered together with the Interim Merger, the Merger). The Reorganization Agreement is attached to this joint proxy statement/prospectus as Annex A and is an integral part of this joint proxy statement/prospectus. The Merger cannot be completed unless Liberty stockholders and Middlefield Banc Corp. stockholders vote to approve and adopt the Reorganization Agreement and the transactions contemplated by the Reorganization Agreement. This joint proxy statement/prospectus contains important information about the Merger and the stockholder meetings of Middlefield and Liberty. You should read the joint proxy statement/prospectus, including its annexes, carefully. The enclosed proxy voting materials allow you to vote your company's common stock without attending the meeting.

Q: What will Liberty stockholders receive in the Merger?

A: Liberty stockholders will receive a combination of cash and Middlefield common stock, in addition to a special dividend of approximately \$3.13 per share in cash immediately prior to the completion of the Merger. Subject to Reorganization Agreement allocation procedures ensuring that approximately 45% of the outstanding Liberty common stock is converted into the right to receive Middlefield common stock and the remaining outstanding Liberty common stock is converted into the right to receive cash, at the effective time of the Merger Liberty common stock not owned by Middlefield will be converted into the right to receive either:

\$37.96 in cash, or

1.1934 shares of Middlefield common stock

On July 27, 2016, which was the day before public announcement of the proposed Merger, the closing price of Middlefield common stock on the Nasdaq Capital Market was \$33.74. Based on that price for the stock portion of the Merger consideration and \$37.96 per share for the cash portion, a Liberty stockholder who receives stock for 45% of

his or her common stock at the 1.1934 fixed exchange ratio and cash for 55% would receive total Merger consideration with an implied value of approximately \$39.00 per share, in addition to a special dividend of approximately \$3.13 per share in cash. As of the more recent _____, 2016 date, the closing price for Middlefield common stock was \$ _____. At that price and giving effect to the 1.1934 fixed exchange ratio, the implied value of a share of Liberty common stock exchanged for Middlefield common stock is \$ _____. At this more recent price for Middlefield common stock, a Liberty stockholder who receives stock for 45% of his or her shares and cash for 55% would receive total Merger consideration with an implied value of approximately \$ _____ per share.

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Middlefield will not issue fractional shares. Instead, a holder of Liberty common stock who would otherwise be entitled to a fractional share (after taking into account all shares of Liberty common stock owned by the holder at the effective time of the Merger) will receive cash, without interest, in an amount equal to the product of the fractional share to which the holder would otherwise be entitled multiplied by the volume-weighted average closing sale price of Middlefield common stock for the 30 trading days immediately before the effective time.

It is not part of the Merger consideration, but the Reorganization Agreement also provides that Liberty will declare a special dividend to stockholders before the Merger closes (or becomes effective). The special dividend is currently estimated to be approximately \$3.0 million in the aggregate, or \$3.13 per share. Middlefield will receive no Merger consideration for its 23,218 Liberty shares but will be entitled to a proportionate share of the special dividend payment.

Q: Will Liberty stockholders be able to make an election for the form of merger consideration they desire to receive?

A: Yes. If you are a Liberty stockholder you will have the opportunity to elect the form of consideration to be received for your shares, but your election will be subject to adjustment and allocation procedures set forth in the Reorganization Agreement ensuring that approximately 45% of the outstanding Liberty common stock is converted into the right to receive Middlefield common stock and the remaining outstanding Liberty shares are converted into the right to receive cash. Therefore, your ability to receive the cash or stock elections of your choice depends on the elections made by other Liberty stockholders. The allocation of the mix of consideration payable to Liberty stockholders in the Merger will not be known until Middlefield tallies the results of the cash and stock elections made by all Liberty stockholders, which will likely not occur until shortly after Merger closing.

It is unlikely that Liberty stockholders as a group will elect to receive precisely 55% of the Merger consideration in cash and the remainder in Middlefield common stock. For that reason the Reorganization Agreement contains procedures to be followed if Liberty stockholders in the aggregate elect to receive more or less of the Middlefield common stock than Middlefield has agreed to issue

If Stock Is Oversubscribed: If Liberty stockholders elect to receive more shares of Middlefield common stock than Middlefield is issuing, all Liberty stockholders who elect to receive cash or who make no election will receive cash for their Liberty shares; stockholders who elect to receive Middlefield common stock will receive a *pro rata* portion of the available Middlefield shares, receiving cash for shares not converted into Middlefield common stock.

If Stock Is Undersubscribed: If Liberty stockholders elect to receive fewer shares of Middlefield common stock than Middlefield is issuing, all Liberty stockholders who elect to receive Middlefield common stock will receive Middlefield common stock; stockholders who elect to receive cash or who make no election will be treated in the following manner:

if the number of shares held by Liberty stockholders who make no election is sufficient to make up the shortfall in the number of shares of Middlefield common stock that Middlefield is issuing, Liberty stockholders who elect cash will receive cash; stockholders who make no election will receive Middlefield common stock in such proportion as is necessary to make up the shortfall, receiving cash for the remainder, and

if the number of shares held by Liberty stockholders who make no election is not sufficient to make up the shortfall, Liberty stockholders who make no election will receive Middlefield common stock; Liberty stockholders who elect to receive cash will receive Middlefield common stock in such proportion as is necessary to make up the shortfall, receiving cash for the remainder.

You might not receive the amount of cash or stock you elect. As a result of the allocation procedures and other limitations outlined in this document and in the Reorganization Agreement, you may receive Middlefield common stock or cash in amounts that vary from the amounts you elect to receive.

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Q: How do Liberty stockholders make their election to receive cash, Middlefield common stock, or a combination of both?

A: Each Liberty stockholder of record will receive an election form to be completed and returned. The election deadline will be 5:00 p.m., Eastern Time, on _____, 2016, which we refer to as the election deadline. A copy of the election form is being mailed separately to Liberty stockholders on or about the date of this joint proxy statement/prospectus.

If you own Liberty shares in street name through a bank, broker, or other nominee and you wish to make an election, you should seek instructions from the bank, broker, or other nominee holding your shares concerning how to make an election. If you do not send in the election form with your stock certificate(s) by the election deadline, you will be treated as though you made no election.

If a Liberty stockholder submits a valid election form and subsequently transfers any or all of the shares as to which an election has been made, that election will continue to apply to those shares in the hands of the transferee unless that election is changed or revoked in a timely fashion in the manner described below.

Q: Will I be allowed to change my election?

A: Yes. Until the election deadline you may change your election by submitting to American Stock Transfer & Trust Company, LLC written notice accompanied by a properly completed and signed, revised election form. After the election deadline you will not be allowed to change or revoke your election. If you instructed a bank, broker, or other financial institution to submit an election for your shares, you must follow their directions for changing those instructions.

Q: What happens if I do not make a valid election to receive cash or Middlefield common stock?

A: If you do not return a properly completed election form by the election deadline specified in the election form, your Liberty common stock will be considered non-election shares and will be converted into the right to receive the stock consideration or the cash consideration according to the allocation procedures specified in the Reorganization Agreement. Generally, if one form of consideration (cash or Middlefield common stock) is undersubscribed, Liberty common stock for which no election is validly made will be allocated to the undersubscribed form before shares electing the oversubscribed form are allocated to the undersubscribed form. If proration becomes necessary, shares for which a valid election is made will have priority over non-electing shares, although electing a particular form of consideration does not guarantee that your election will be honored in full.

Q: What are the material U.S. federal income tax consequences of the Merger to Liberty stockholders?

A: Tucker Ellis LLP has delivered its legal opinion, dated September 26, 2016, to the effect that the Merger qualifies as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended

(which we refer to as the Internal Revenue Code). In addition, the completion of the Merger is conditioned on receipt of a tax opinion from Tucker Ellis LLP, dated as of the closing date, to the same effect. However, neither Liberty nor Middlefield has requested or received a ruling from the Internal Revenue Service that the Merger will qualify as a reorganization or as to any other aspect of the Reorganization Agreement or the transactions contemplated by it. The U.S. federal income tax consequences of the Merger to a Liberty stockholder will depend on the relative mix of cash and Middlefield common stock received by that Liberty stockholder. Liberty stockholders should not recognize any gain or loss for U.S. federal income tax purposes if they exchange their Liberty shares solely for shares of Middlefield common stock in the Merger, except with respect to cash received in lieu of fractional shares of Middlefield common stock. Liberty stockholders will recognize gain or loss if they exchange their Liberty shares solely for cash in the Merger. Liberty stockholders will recognize gain, but not loss, if they exchange their Liberty shares for a combination of Middlefield common stock and cash, but their taxable gain in that case will not exceed the cash they receive in the Merger. The special dividend is not part of the Merger consideration. It will be taxable to Liberty stockholders as ordinary income, taxable at preferential rates applicable to qualified dividends. Any gain recognized on the Merger consideration and any ordinary

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income from the special dividend could be subject to an additional tax on net investment income, depending on the individual's adjusted gross income, as described below under *THE MERGER Material U.S. Federal Income Tax Consequences Medicare Tax on Net Investment Income*. You should consult with your tax advisor for the specific tax consequences of the Merger and the special dividend to you. See *THE MERGER Material U.S. Federal Income Tax Consequences* on page 73.

The consequences of the Merger to each Liberty stockholder depend on that stockholder's particular facts and circumstances. Accordingly, you are urged to consult your tax advisor to determine the tax consequences of the Merger to you.

Q: Is Liberty allowed to pay dividends before the effective date of the Merger?

A: Yes. Under the terms of the Reorganization Agreement, Liberty is permitted to pay usual and customary cash dividends. The Reorganization Agreement also requires Liberty to declare a special dividend before closing. The amount of the special dividend may change, but it currently is estimated at approximately \$3.0 million in the aggregate, or \$3.13 per share.

Q: When and where will the Middlefield and Liberty stockholder meetings be?

A: Middlefield's special meeting of stockholders will be held at 10:00 a.m., local time, on January 10, 2017 at The Middlefield Banking Company, 15985 East High Street, Middlefield, Ohio 44062. The annual meeting of Liberty stockholders will be held at 9:00 a.m., local time, on December 22, 2016 at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio 44128.

Q: What proposals will be acted on at the Middlefield and Liberty stockholder meetings?

A: Middlefield stockholders will be asked to (1) approve the transactions under the Reorganization Agreement, (2) approve issuance of up to 563,261 shares of Middlefield common stock in the Merger, (3) approve adjournment of the special meeting to allow additional time for proxy solicitation if there are not sufficient votes to approve the Reorganization Agreement transactions, and (4) vote on any other business properly presented.

Liberty stockholders will be asked to (1) adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, (2) approve adjournment of the annual meeting to allow additional time for proxy solicitation if there are not sufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, (3) elect twelve directors for the term expiring at the earlier of (i) completion of the Merger or (ii) the 2017 annual meeting and until their successors are elected and qualified, (4) ratify the selection of independent auditors, and (5) vote on any other business properly presented.

Q: What do the Board of Directors of Middlefield and the Board of Directors of Liberty recommend regarding the proposals to be acted on at the stockholder meetings?

Middlefield's board of directors believes that the Merger and other transactions under the Reorganization Agreement are in the best interests of Middlefield and its stockholders and recommends that Middlefield stockholders vote FOR the proposal to approve the transactions under the Reorganization Agreement, FOR the proposal to issue Middlefield common stock in the Merger, and FOR the proposal to adjourn the special meeting to solicit additional proxies if there are insufficient votes to approve the Reorganization Agreement transactions.

Liberty's board of directors also determined that the Reorganization Agreement is in the best interests of Liberty and its stockholders and recommends that Liberty stockholders vote FOR the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement and FOR the proposal to adjourn the annual meeting to solicit additional proxies if there are insufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement. Regarding the other proposals to be presented at the annual meeting, Liberty's board of directors recommends that stockholders vote FOR election of the identified director nominees and FOR ratification of the selection of the independent auditor.

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Q: Is my vote needed to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement and to approve the other proposals?

A: Adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement requires the affirmative vote of the holders of at least two-thirds of the shares of Liberty common stock outstanding. When Liberty's stockholder meeting is held, if there are insufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to approve adjournment. All of Liberty's directors entered into voting agreements with Middlefield as a condition to Middlefield's agreement to the Reorganization Agreement (the "Voting Agreements"), agreeing to vote their Liberty shares in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement and in favor of the adjournment proposal. Excluding Liberty shares held by their immediate family members, Liberty's directors collectively own 354,986 shares of Liberty common stock, or approximately 34.3% of the shares outstanding. The form of Voting Agreement is an exhibit to the Reorganization Agreement included as Annex A to this joint proxy statement/prospectus. As a holder of 23,218 shares of Liberty common stock, or 2.2%, Middlefield intends to vote in favor of adoption and approval of the Reorganization Agreement, in favor of the adjournment proposal, in favor of election of the identified director nominees, and in favor of ratifying the selection of independent accountants.

For the proposal to elect directors at Liberty's annual meeting, directors are elected by plurality vote, which means the directors receiving the greatest number of votes are elected. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to ratify selection of Liberty's independent auditor.

Similar to the approval standard applicable to the Liberty stockholder meeting, approval of the transactions under the Reorganization Agreement by Middlefield stockholders requires the affirmative vote of the holders of at least two-thirds of the shares of Middlefield common stock outstanding. If there are insufficient votes to approve the Reorganization Agreement transactions when Middlefield's stockholder meeting is held, the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the votes cast is necessary to approve adjournment. To approve issuance of Middlefield common stock in the Merger, the affirmative vote of a majority of the votes cast is necessary. Middlefield directors did not enter into agreements regarding voting of their shares of Middlefield common stock. Collectively they own approximately 102,153 shares, or approximately 4.6% of Middlefield's outstanding common stock, with the right to acquire 20,674 additional shares.

Q: How do I vote?

A: If you were the record holder of Middlefield common stock on the November 17, 2016 record date for the Middlefield special meeting or Liberty common stock on the November 25, 2016 record date for the Liberty annual meeting, you may vote in person by attending your company's meeting, and to ensure that your shares are represented at the meeting you may vote by signing and returning your company's enclosed proxy card in the postage-paid envelope provided.

If you hold Middlefield or Liberty common stock beneficially through a broker, bank, or other nominee, please see the discussion below regarding shares held in street name.

Q: What will happen if I fail to vote or if I abstain from voting?

A: If you are a Liberty stockholder and you do not return a proxy card or vote in person at the Liberty annual meeting or if you mark the proxy card or ballot **ABSTAIN** for the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, this will have the same effect as a vote **AGAINST** that proposal. Marking your proxy card or ballot **ABSTAIN** will have the same effect as a vote **AGAINST** the adjournment proposal and the auditor

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ratification proposal. Failure to return your proxy card or vote in person will have no effect on the adjournment proposal, the proposal to elect directors, or the proposal to ratify the auditor selection. If you are a Middlefield stockholder and you do not return a proxy card or vote in person at the Middlefield special meeting or if you mark the proxy card or ballot **ABSTAIN** for the proposal to approve the transactions under the Reorganization Agreement, this will have the same effect as a vote **AGAINST** that proposal, but failing to vote or abstaining will have no effect on the adjournment proposal or the proposal to approve issuance of shares.

Q: How will my shares be voted if I return a signed proxy card without marking voting instructions?

A: If you are a Liberty stockholder and you sign, date, and return a proxy card without stating how you want your shares to be voted, your shares will be voted **FOR** adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, and if adjournment of the meeting is necessary to allow time for solicitation of additional proxies your shares will be voted **FOR** adjournment. Similarly, your shares will be voted **FOR** election of the identified director nominees and **FOR** ratification of the auditor selection if you return a valid proxy card without giving voting instructions.

If you are a Middlefield stockholder and you sign, date, and return a proxy card without giving voting instructions, your shares will be voted **FOR** approval of the transactions under the Reorganization Agreement and **FOR** approval of the share issuance, and if adjournment of the meeting is necessary to allow time for solicitation of additional proxies your shares will be voted **FOR** adjournment.

Q: If my shares are held in a stock brokerage account or by a bank or other nominee in street name, will my broker, bank, or other nominee vote shares for me?

A: No. If you do not provide the broker, bank, or nominee (the record holder of your shares) with instructions for voting your shares, the broker, bank, or other nominee will not be able to vote on any proposal other than ratification of independent auditors. Please follow the broker, bank, or other nominee's directions for giving voting instructions to the broker, bank, or nominee.

if you hold Liberty shares in street name through a broker, bank, or other nominee but do not give voting instructions to the broker, bank, or other nominee, the broker, bank, or other nominee may not vote your shares on the proposal to adopt and approve the Reorganization Agreement and the Merger or the proposal to adjourn the meeting, which broker non-votes will have the same effect as votes **AGAINST** those proposals. Failing to give voting instructions also will prevent the broker, bank, or other nominee from voting on the director election proposal, but directors nevertheless will be elected because directors are elected by a plurality; however, your broker, bank, or other nominee will be able to vote on the auditor ratification proposal without voting instructions,

if you are a Middlefield stockholder but do not give voting instructions to your broker, bank, or other nominee, the broker, bank, or other nominee may not vote your shares on the proposal to approve the transactions under the Reorganization Agreement, which broker non-vote will have the same effect as a vote

AGAINST that proposal. Although failing to give voting instructions also will prevent your broker, bank, or other nominee from voting on the proposal to issue common stock or the adjournment proposal, broker non-votes on those proposals have no effect because under Middlefield's regulations the proposals will be decided by a majority of votes actually cast.

Under applicable Financial Industry Regulatory Authority (FINRA) and stock exchange rules, brokers who hold shares in street name for a beneficial owner are allowed to vote in their discretion on routine proposals, even without voting instructions from beneficial owners. For proposals stock exchanges consider non-routine, however, brokers are not allowed to exercise voting discretion and cannot vote on those non-routine proposals unless the beneficial owner gives specific voting instructions. Except for the auditor ratification proposal to be acted on at the Liberty stockholder meeting, Middlefield and Liberty believe the

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proposals to be voted on at the stockholder meetings are non-routine and that brokers therefore will not be able to vote without specific voting instructions. Broker non-votes occur when a broker or nominee is not instructed by the beneficial owner of shares to vote on a particular proposal for which the broker does not have discretionary voting power.

Q: May I change my vote after submitting a proxy?

A: Yes, but only until a vote is taken. Middlefield stockholders who hold directly, not in street name, may revoke a proxy at any time before a vote is taken by (x) filing a written notice of revocation with Middlefield's Secretary, at 15985 East High Street, Middlefield, Ohio 44062-0035, (y) executing and returning another proxy card with a later date, or (z) attending the meeting and giving notice of revocation in person. Liberty stockholders may revoke a proxy at any time before a vote is taken by (x) filing a written notice of revocation with Liberty's Secretary, at 25201 Chagrin Boulevard, Suite 120, Beachwood, Ohio 44122, (y) executing and returning another proxy card with a later date, or (z) attending the meeting and giving notice of revocation in person. A revocation notice or a later dated proxy will not be effective unless actually received by Liberty prior to the vote.

Your attendance at the meeting will not, by itself, revoke your proxy.

If you hold shares in street name and gave voting instructions to the broker, bank, or nominee, you must follow the broker, bank or nominee's directions for changing your vote.

Q: If I do not favor adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, what are my dissenters' rights?

A: Under federal banking law Liberty stockholders may dissent from the Merger and elect to have the fair market value of their shares appraised, receiving payment for their shares in cash. To assert dissenters' right of appraisal, a stockholder must comply with the provisions of federal law, which include voting against the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement or giving notice to the presiding officer in writing at or before Liberty's meeting that the stockholder dissents. For more information see *DISSENTERS' RIGHTS* and the copy of the applicable statutory provision included as Annex B to this joint proxy statement/prospectus.

Q: When will the Merger be completed?

A: Middlefield and Liberty desire to complete the Merger in the first quarter of 2017, but achieving that goal is contingent on obtaining stockholder approvals and applicable governmental approvals and on satisfying all other conditions precedent to the Merger.

Q: Should Liberty stockholders send in their share certificates now?

A: No. Within five business days after the Merger is completed, the Exchange Agent for the Merger will send Liberty stockholders a letter of transmittal with instructions for delivering share certificates to the Exchange Agent. American Stock Transfer & Trust Company, LLC will act as Exchange Agent. Liberty stockholders must use the letter of transmittal to exchange Liberty share certificates for Merger consideration. Do not send in share certificates with your proxy form.

Q: What do I need to do now?

A: After carefully reviewing this joint proxy statement/prospectus, including its Annexes, please complete, sign, and date the enclosed proxy card and return it in the enclosed postage-paid envelope as soon as possible. By submitting your proxy, you authorize the individuals named in your company's proxy to vote your shares at your company's meeting of stockholders in accordance with your instructions. ***Your vote is very important. Regardless of whether you plan to attend the meeting, please submit your proxy with voting instructions to ensure that your shares are voted.***

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Q: Are there risks that I should consider in deciding whether to vote in favor of the Reorganization Agreement and the other proposals?

A: Yes. You should read and carefully consider the section of this joint proxy statement/prospectus captioned *RISK FACTORS*, which begins on page 28.

Q: Who can answer my questions?

A: If you have questions about the Merger or desire additional copies of this joint proxy statement/prospectus or additional proxy cards, please contact your company or its proxy solicitor at the applicable address below:

Middlefield stockholders:

Middlefield Banc Corp.

Attention: Investor Relations

15985 East High Street

P.O. Box 35

Middlefield, Ohio 44062-0035

(440) 632-1666

D.F. King & Co. (Middlefield's Proxy Solicitor)

48 Wall Street

New York, New York 10005

Toll-Free: (800) 967-5084

Liberty stockholders:

Liberty Bank, N.A.

Attention: Stockholder Relations

25201 Chagrin Boulevard, Suite 120

Beachwood, Ohio 44122

(216) 359-5500

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SUMMARY

This summary highlights selected information from this joint proxy statement/prospectus. It does not necessarily contain all of the information that is important to you. You should read carefully this entire document, including its Annexes, and all other documents to which this joint proxy statement/prospectus refers before you decide how to vote. This summary includes page references directing you to more detailed information.

The Companies

Middlefield Banc Corp.

15985 East High Street

P.O. Box 35

Middlefield, Ohio 44062-0035

Phone: (440) 632-1666

Middlefield is a one-bank holding company. Middlefield's principal subsidiary is The Middlefield Banking Company, an Ohio-chartered, nonmember commercial bank. Middlefield's other subsidiary, EMORECO Inc., is an asset resolution corporation dedicated to the resolution and disposition of troubled assets of a central-Ohio bank that Middlefield acquired in 2007, specifically nonperforming loans and other real estate owned (OREO) held by the acquired bank as the result of borrower defaults on real estate-secured loans. That bank, Emerald Bank, operated as a separate subsidiary of Middlefield from 2007 through 2013, merging into The Middlefield Banking Company on January 20, 2014. At the end of September 2016 The Middlefield Banking Company had total assets of \$760.6 million and more than 140 employees.

The Middlefield Banking Company offers a broad range of banking services, including online banking and bill payment services for individuals and online cash management services for business customers at www.middlefieldbank.com. The Middlefield Banking Company's customers are small and medium-sized businesses, professionals, small business owners, and retail customers. Loan products include operational and working capital loans, loans to finance capital purchases, term business loans, residential construction loans, selected guaranteed or subsidized loan programs for small businesses, professional loans, residential and mortgage loans, and consumer installment loans to purchase automobiles or boats, make home improvements, and for other personal expenditures. The bank makes available customary deposit-related products and services, such as checking, savings, negotiable order of withdrawal accounts, money market accounts, time certificates of deposit, safe deposit facilities, and travelers' checks.

The Middlefield Banking Company operates in two distinct and very competitive markets, one in the northeastern Ohio counties of Geauga, Portage, Trumbull, Ashtabula, and Lake. The other market is central Ohio, specifically the Columbus area and Franklin County, the result of the 2007 acquisition of Emerald Bank. Ohio has a high concentration of financial service firms, many of which are significantly larger institutions with greater financial resources. Savings banks, savings and loan associations, commercial banks, mortgage banking companies, credit unions, insurance companies and other financial service companies compete to make loans. Savings and loan associations, savings banks, commercial banks, and credit unions compete for deposits, but non-depository entities such as mutual funds, securities and brokerage firms, and insurance companies also compete for depositors' funds.

The Middlefield Banking Company's operations have historically been concentrated in the area east of Liberty's market, in largely rural areas with a large Amish population. The Middlefield Banking Company's business originated in this market and was not an outgrowth of the nearby Cleveland-area or Akron-area markets. This includes Geauga County, where The Middlefield Banking Company's business began in 1901 and where four of its ten offices are located, and northern Portage County, where two offices are located, with a

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seventh office in Cortland in Trumbull County, an office in Orwell in southern Ashtabula County, and two offices in central Ohio, in Franklin County. The Middlefield Banking Company's eleventh banking office opened in October 2016 in Sunbury, also in central Ohio, in Delaware County. It also has a loan production office in Mentor, in Lake County. The Middlefield Banking Company's northeast Ohio market adjoins the market of Liberty, which is to the immediate west.

Middlefield common stock trades on the Nasdaq Capital Market under the symbol **MBCN**. Middlefield is subject to reporting requirements under the Securities Exchange Act of 1934, filing annual, quarterly, and current reports, proxy statements, and other information with the SEC.

Liberty Bank, N.A.

25201 Chagrin Boulevard, Suite 120

Beachwood, Ohio 44122

Phone: (216) 359-5500

Liberty is a national bank established in October 1990. Liberty currently has approximately 40 employees. Liberty's three bank offices are in Twinsburg in northern Summit County and Beachwood and Solon in eastern Cuyahoga County, Ohio. Liberty common stock is not listed on an exchange or traded over the counter. From inception, Liberty has been associated with the Akron and Cleveland business community and has sought to be a community banking resource for individuals and small business customers seeking the personalized service and local decision-making that distinguish community banks from the much larger regional and national banking institutions dominating the banking markets in Akron and Cleveland.

After the Merger, The Middlefield Banking Company will conduct through Liberty's three bank offices the typical community banking business The Middlefield Banking Company has conducted through its offices since 1901. Both banks are community banks, and although Liberty serves the credit and deposit needs not only of local small businesses but also individuals, Liberty's identity, its physical branch presence, and its marketing focus are more characteristic of a small business bank. The Middlefield Banking Company actively seeks to serve the lending and deposits needs not only of business customers but also individuals, for example individuals seeking home mortgage credit who do not have a preexisting commercial borrowing or deposit relationship with The Middlefield Banking Company. Middlefield believes the Merger will have the consequence of Liberty's office locations being occupied by a community bank with a broader customer focus, with more active consumer marketing of The Middlefield Banking Company's products and services in its new market in Cuyahoga County and Summit County.

The Reorganization Agreement (page 78)

If all of the Reorganization Agreement conditions are satisfied or waived, Liberty will merge into The Middlefield Banking Company, with The Middlefield Banking Company surviving. The Reorganization Agreement is Annex A to this joint proxy statement/prospectus and forms part of this joint proxy statement/prospectus. ***We encourage you to read the Reorganization Agreement carefully. It is the principal legal document governing the Merger.*** Immediately before Liberty merges into The Middlefield Banking Company, an interim bank subsidiary organized by Middlefield will merge into Liberty, with Liberty surviving momentarily before Liberty immediately thereafter merges into The Middlefield Banking Company.

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What Liberty stockholders will receive in the Merger (page 79)

Liberty stockholders will be entitled to receive from Middlefield a combination of cash and Middlefield common stock when the Merger is completed, in addition to a special dividend of approximately \$3.13 per share in cash immediately prior to the completion of the Merger. Subject to allocation procedures in the Reorganization Agreement ensuring that approximately 45% of the outstanding Liberty common stock is converted into Middlefield common stock and the remaining outstanding Liberty common stock is converted into cash, at the effective time of the Merger Liberty common stock not owned by Middlefield will be converted into the right to receive either:

\$37.96 in cash, or

1.1934 shares of Middlefield common stock

Liberty stockholders will own up to approximately 20% of the Middlefield common stock outstanding after the Merger. Middlefield will not issue fractional shares. Instead, a holder of Liberty common stock who would otherwise be entitled to a fractional share (after taking into account all Liberty common stock owned by the holder at the effective time of the Merger) will receive cash, without interest, equal to the product of the fractional share to which the holder would otherwise be entitled multiplied by the volume-weighted average closing sale price of Middlefield common stock for the 30 trading days immediately before the effective time.

It technically is not part of the Merger consideration, but pursuant to the Reorganization Agreement, Liberty must declare a special dividend to stockholders before Merger closing. The special dividend is currently estimated to be approximately \$3.0 million in the aggregate, or \$3.13 per share. Middlefield will not receive Merger consideration for its 23,218 Liberty shares but will be entitled to a proportionate share of the special dividend payment.

What holders of Liberty stock options and phantom shares will receive (page 79)

Liberty's compensation arrangements for officers and employees include equity-based awards, including stock options and phantom awards. There are option awards outstanding for 13,572 shares, all of which are vested, including options held by Liberty's Chief Credit Officer to acquire a total of 4,000 shares. At the effective time of the Merger each outstanding and unexercised option to purchase Liberty common stock will be cancelled in exchange for a cash payment equal to (x) the positive difference between \$41.09 and the exercise price of the option, multiplied by (y) the number of shares of Liberty common stock acquirable by option exercise. There are also outstanding 2,000 phantom share awards made in 2013. The phantom share awards consist of the right to a cash payment equal to the positive difference between Liberty's stock value on December 31, 2016 and the stock value on the award date, multiplied by the number of phantom shares awarded, with value being determined by Liberty's board of directors. The total cash payment for cancellation of the options and phantom awards is estimated to be \$161,931, of which \$62,986 is payable to Liberty's Chief Credit Officer. The \$41.09 figure is the sum of the \$37.96 per share cash Merger consideration and the \$3.13 per share special dividend.

Exchange of Liberty common stock certificates (page 79)

When the Merger is complete, acting as exchange agent, American Stock Transfer & Trust Company, LLC will mail to Liberty stockholders transmittal materials and instructions for exchanging Liberty share certificates for Middlefield common stock to be issued by book-entry transfer.

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Liberty annual meeting of stockholders (page 34)

The Liberty annual meeting of stockholders will be held at 9:00 a.m., local time, on December 22, 2016 at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio 44128 for the purpose of considering and voting on proposals to

adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement,

adjourn the annual meeting if adjournment is necessary to allow solicitation of additional proxies because of insufficient votes to adopt and approve the Reorganization Agreement,

elect twelve directors to serve until the earlier of (i) completion of the Merger or (ii) the 2017 annual meeting and until their successors are elected and qualified,

ratify the appointment of Maloney + Novotny LLC as independent public accountants for the fiscal year ending December 31, 2016, and

transact any other business properly presented at the meeting or at any adjournment or postponement. The Liberty board of directors currently is not aware of any other business to be presented at the meeting. You are entitled to vote at the annual meeting if you owned Liberty common stock as of the close of business on the November 25, 2016 record date. As of that date a total of _____ shares of Liberty common stock were outstanding and eligible to vote at the Liberty annual meeting.

Middlefield special meeting of stockholders (page 44)

A special meeting of stockholders of Middlefield will be held at 10:00 a.m., local time, on January 10, 2017 at The Middlefield Banking Company, 15985 East High Street, Middlefield, Ohio, 44062 for the purpose of considering and voting on proposals to

approve the transactions under the Reorganization Agreement,

issue up to 563,261 shares of Middlefield common stock in the Merger,

adjourn the special meeting if adjournment is necessary to allow solicitation of additional proxies because of insufficient votes to adopt and approve the Reorganization Agreement, and

transact any other business properly presented at the special meeting or any adjournment or postponement. The Middlefield board of directors currently is not aware of any other business to be presented at the meeting.

You are entitled to vote at the special meeting if you owned Middlefield common stock as of the close of business on the November 17, 2016 record date. As of that date a total of 2,250,893 shares were outstanding and eligible to vote at the Middlefield special meeting.

Required vote (pages 34, 44)

Liberty. A quorum will exist at Liberty's annual meeting if a majority of the outstanding common stock is represented in person or by proxy. The Reorganization Agreement will be adopted and approved and the transactions contemplated by the Reorganization Agreement will be approved if they receive the affirmative vote of the holders of at least two-thirds of Liberty's outstanding common stock. If there are insufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement when the meeting is held, the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to approve adjournment.

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All of Liberty's directors agreed to vote their Liberty shares in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, in favor of the adjournment proposal and in favor of entering into voting agreements with Middlefield as a condition to Middlefield's agreement to enter into the Reorganization Agreement (*Voting Agreements*). Excluding Liberty shares held by their immediate family members, Liberty's directors collectively own 354,986 shares of Liberty common stock, or approximately 34.3% of the shares outstanding. The form of Voting Agreement is an exhibit to the Reorganization Agreement attached as Annex A to this joint proxy statement/prospectus. As a group, Liberty's directors, executive officers, and affiliates own 357,889 shares of Liberty common stock, or 34.6% of shares outstanding, with the right to acquire an additional 4,000 shares. As a holder of 23,218 shares of Liberty common stock, or 2.2%, Middlefield intends to vote in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated under the Reorganization Agreement and in favor of the adjournment proposal.

For the proposal to elect directors at Liberty's annual meeting, directors are elected by plurality vote, which means the directors receiving the greatest number of votes are elected. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to ratify selection of Liberty's independent auditor. Middlefield intends to vote in favor of electing the director nominees identified in this joint proxy statement/prospectus and in favor of ratifying the selection of Liberty's independent auditor.

Middlefield. A quorum at Middlefield's special meeting is a majority of the shares outstanding, whether present in person or by proxy. The Reorganization Agreement will be adopted and approved if it receives the affirmative vote of the holders of at least two-thirds of Middlefield's outstanding common stock. If there are insufficient votes to adopt and approve the Reorganization Agreement when the meeting is held, the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the votes cast is necessary to approve adjournment. To approve issuance of Middlefield common stock in the Merger, the affirmative vote of a majority of the votes cast is necessary.

As a group, Middlefield's directors, executive officers, and affiliates own 106,138 shares of Middlefield common stock, or 4.72% of shares outstanding, with the right to acquire 28,249 additional shares.

Recommendation to Liberty stockholders (page 55)

Liberty's board of directors unanimously approved the Reorganization Agreement and the transactions contemplated by the Reorganization Agreement. Liberty's board believes the Merger is in the best interests of Liberty and its stockholders. The board unanimously recommends that Liberty stockholders vote **FOR** adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement and, if the adjournment proposal is presented for a vote, **FOR** adjournment to allow additional proxy solicitation. Liberty's board considered many factors in this decision, which are described in the section captioned *THE MERGER Background of the Merger* beginning on page 49 and *THE MERGER Liberty's Reasons for the Merger* beginning on page 53 of this joint proxy statement/prospectus. Liberty's board also recommends that stockholders vote **FOR** election of the identified director nominees and **FOR** ratification of the selection of independent accountants.

Opinion of Liberty's Financial Advisor (page 55)

On July 27, 2016 Liberty's financial advisor, Boenning & Scattergood, Inc. (*Boenning*), delivered to Liberty's board of directors a written opinion concerning the fairness, from a financial point of view, of the Merger consideration to be received by the holders of Liberty common stock. The full text of the opinion,

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describing the procedures followed, assumptions made, matters considered, and qualifications and limitations on the review undertaken by Boenning, is attached as Annex C to this joint proxy statement/prospectus.

Boenning's opinion was for the information of and was directed to Liberty's board for the board's consideration of the financial terms of the Merger. The opinion does not pertain to Liberty's underlying business decision to engage in the Merger or enter into the Reorganization Agreement. The opinion does not constitute a recommendation to the Liberty board regarding the Merger and it does not constitute a recommendation to any holder of Liberty common stock or any stockholder of any other entity regarding how to vote on the Merger or on any other proposal.

Recommendation to Middlefield stockholders (page 63)

Middlefield's board of directors also unanimously approved the Reorganization Agreement. Middlefield's board believes the Merger is in the best interests of Middlefield and its stockholders. The board unanimously recommends that Middlefield stockholders vote **FOR** approval of the transactions contemplated by the Reorganization Agreement, **FOR** issuance of up to 563,261 shares of common stock in the Merger, and **FOR** adjournment to allow additional proxy solicitation if the adjournment proposal is presented for a vote. In reaching this decision Middlefield's board of directors considered many factors as described in the section captioned *THE MERGER Background of the Merger* beginning on page 49 and *THE MERGER Middlefield's Reasons for the Merger* beginning on page 62 of this joint proxy statement/prospectus.

Opinion of Middlefield's Financial Advisor (page 63)

Middlefield's financial advisor, Donnelly Penman & Partners Inc., delivered to Middlefield's board of directors a July 27, 2016 opinion concerning the fairness to Middlefield stockholders, from a financial point of view, of the consideration being paid. Describing the procedures followed, assumptions made, matters considered, and qualifications and limitations on the review undertaken by Donnelly Penman & Partners Inc., the full text of the opinion is attached as Annex D to this joint proxy statement/prospectus.

Donnelly Penman & Partners Inc.'s opinion was for the information of and was directed to Middlefield's board for its consideration of the financial terms of the Merger. The opinion does not pertain to Middlefield's underlying business decision to engage in the Merger or enter into the Reorganization Agreement. The opinion does not constitute a recommendation to the Middlefield board regarding the Merger and it does not constitute a recommendation to any Middlefield stockholder regarding how to vote on the Merger or on any other proposal.

Material U.S. federal income tax consequences (page 73)

The U.S. federal income tax consequences of the Merger to a Liberty stockholder will depend on the relative mix of cash and Middlefield common stock received by such Liberty stockholder. Liberty stockholders should not recognize any gain or loss for U.S. federal income tax purposes if they exchange their Liberty shares solely for shares of Middlefield common stock in the Merger, except with respect to cash received in lieu of fractional shares of Middlefield common stock. Liberty stockholders will recognize gain or loss if they exchange their Liberty shares solely for cash in the Merger. Liberty stockholders will recognize gain, but not loss, if they exchange their Liberty shares for a combination of Middlefield common stock and cash, but their taxable gain in that case will not exceed the cash they receive in the Merger. **The tax consequences of the Merger to each Liberty stockholder will depend on such Liberty stockholder's own situation. Liberty stockholders should consult with their own tax advisors for a full understanding of the tax consequences of the Merger to them.** Tucker Ellis LLP has delivered a tax opinion,

dated September 26, 2016, to the effect that the Merger qualifies as a reorganization under Section 368(a) of the Internal Revenue Code. In addition, the completion of

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the Merger is conditioned on receipt of a tax opinion from Tucker Ellis LLP, dated the closing date, to the same effect as the opinion described in the preceding sentence. The opinion will not bind the Internal Revenue Service, which could take a different view.

See *THE MERGER Material U.S. Federal Income Tax Consequences* for a more detailed discussion of the tax consequences of the Merger.

Interests of directors and certain executive officers of Liberty (page 72)

Directors and certain executive officers of Liberty have employment and other compensation agreements or economic interests that give them interests in the Merger that are somewhat different from or in addition to their interests as Liberty stockholders. These interests and agreements include:

two members of the Liberty board of directors will be appointed to Middlefield's board of directors. These directors are Chairman, President, and CEO William A. Valerian and Director Thomas W. Bevan,

all outstanding stock options issued by Liberty to officers and employees will be cancelled in exchange for cash equal to (x) the positive difference between \$41.09 and the exercise price of the option, multiplied by (y) the number of shares of Liberty common stock acquirable by option exercise; of the \$161,931 total payable in cancellation of options and phantom stock, \$62,986 will be paid to Senior Vice President and Chief Credit Officer Craig E. Reay. Mr. Valerian's son holds 1,000 phantom shares, which will be cancelled in exchange for \$15,200 in cash,

Liberty's CEO William A. Valerian and CFO Richard C. Ebner have employment agreements with Liberty. The employment agreements provide that they are entitled to a payment equal to 2.5 times salary when a change in control occurs, payable in equal installments over 30 months, plus payments for the cost of life insurance, long-term disability, and medical benefits over those 30 months. The Merger will constitute a change in control under those employment agreements. Mr. Valerian's total payments are estimated to be \$929,502 and Mr. Ebner's are estimated to be \$716,900,

certain Liberty officers will receive retention bonuses to remain with Liberty through consummation of the Merger,

the Reorganization Agreement provides that Middlefield will consult with Liberty about forming a Northeast Ohio Advisory Board, which would include some of Liberty's current directors, and

the Reorganization Agreement preserves for six years the rights of Liberty's officers and directors to continued indemnification coverage and continued coverage under directors' and officers' liability insurance policies. Each of Middlefield's and Liberty's board of directors was aware of these interests and considered them in approving the Reorganization Agreement and the transactions contemplated by the Reorganization Agreement. See *THE MERGER Interests of Liberty Directors and Executive Officers in the Merger* beginning on page 72 of this joint

proxy statement/prospectus.

Dissenters' rights of Liberty stockholders (page 48)

The National Bank Act gives Liberty stockholders the right to dissent from the Merger and elect to have the fair market value of their shares appraised, receiving payment for their shares in cash. To assert dissenters' rights of appraisal, a stockholder must comply with the requirements of the National Bank Act, which include voting against the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement or giving notice in writing at or before Liberty's meeting that the

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stockholder dissents by giving notice to the presiding officer. For more information, see *DISSENTERS RIGHTS* and the copy of the applicable statutory provision attached as Annex B to this joint proxy statement/prospectus.

A Liberty stockholder who has questions regarding dissenters' rights should consult his or her legal advisers.

Differences in stockholder rights (page 91)

Liberty stockholders who receive Middlefield common stock will be Middlefield stockholders when the Merger is completed. As such, their rights will be governed by Middlefield's Second Amended and Restated Articles of Incorporation and Regulations, as well as Ohio law. For a summary of significant differences between the rights of Middlefield stockholders and the rights of Liberty stockholders, see *COMPARISON OF RIGHTS OF LIBERTY AND MIDDLEFIELD STOCKHOLDERS* beginning on page 91 of this joint proxy statement/prospectus.

Conditions to the Merger (page 88)

As more fully described in this joint proxy statement/prospectus and in the Reorganization Agreement, completion of the Merger depends on adoption and approval of the Reorganization Agreement by Middlefield stockholders and by Liberty stockholders, and satisfaction or waiver of other customary merger closing conditions. Middlefield and Liberty desire to complete the Merger in the first quarter of 2017. See *THE REORGANIZATION AGREEMENT Conditions to the Merger* beginning on page 88 of this joint proxy statement/prospectus.

Termination; Termination Fee (page 89)

The Reorganization Agreement may be terminated before the effective time of the Merger, whether before or after approval by Liberty stockholders and Middlefield stockholders:

by mutual written consent of Middlefield and Liberty,

by either Middlefield or Liberty if the other party breaches its covenants or representations and warranties and the breach is not cured within 30 days after written notice or by its nature cannot be cured (provided the terminating party is not also in breach of its covenants or representations and warranties),

by either Middlefield or Liberty if the Merger does not occur by May 30, 2017 (or a later date the parties may agree to), unless the failure to close by that date is the result of the terminating party's breach of covenants or representations and warranties in the Reorganization Agreement,

by either Middlefield or Liberty if the Liberty stockholders or the Middlefield stockholders do not vote to approve the Reorganization Agreement,

by either party if a required governmental approval is denied by final, non-appealable action, or if a governmental entity issues a final, non-appealable order, injunction, or ruling enjoining or otherwise prohibiting consummation of the Merger,

by Middlefield if Liberty becomes subject to a formal bank regulatory enforcement action,

by Middlefield if Liberty's board fails to recommend adoption and approval of the Reorganization Agreement to Liberty stockholders or withdraws or adversely changes the recommendation in favor of the Reorganization Agreement, or if Liberty accepts a competing acquisition proposal, and

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by Liberty if it accepts a superior acquisition proposal, but Liberty's termination right is conditioned on Liberty giving to Middlefield notice of the superior proposal and the opportunity to modify Middlefield's merger proposal.

Liberty may be required to pay a termination fee of \$1.65 million to Middlefield if (i) the Reorganization Agreement is terminated as described in the seventh and eighth bullet points above or (ii) if a competing acquisition proposal is made known to Liberty, Middlefield subsequently terminates the Reorganization Agreement, and Liberty enters into a definitive agreement relating to the competing acquisition proposal within one year of the termination of the Reorganization Agreement. See *THE REORGANIZATION AGREEMENT Termination; Termination Fee* beginning on page 89.

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SELECTED UNAUDITED PRO FORMA CONDENSED COMBINED CONSOLIDATED FINANCIAL DATA

The following unaudited pro forma condensed combined consolidated balance sheet as of September 30, 2016 and the unaudited pro forma condensed combined consolidated statements of income for the nine months ended September 30, 2016 and for the year ended December 31, 2015 are based on the historical financial statements of Middlefield and Liberty after giving effect to the Merger. The Merger will be accounted for using the acquisition method of accounting in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 805, Business Combinations (ASC 805).

The unaudited pro forma condensed combined consolidated statements of income for the nine months ended September 30, 2016 and for the year end December 31, 2015 give effect to the Merger as of the beginning of all periods presented. The unaudited pro forma condensed combined consolidated balance sheet as of September 30, 2016 assumes that the Merger took place on September 30, 2016.

The unaudited condensed combined consolidated balance sheet and statement of income as of and for the nine months ended September 30, 2016 were derived from Middlefield s unaudited condensed financial statements and Liberty s unaudited condensed financial statements and as of and for the nine months ended September 30, 2016. The unaudited condensed statement of income for the year ended December 31, 2015 was derived from Middlefield s and Liberty s audited statements of income for the year ended December 31, 2015.

The pro forma condensed combined consolidated financial statements reflect management s best estimate of the fair value of the tangible and intangible assets acquired and liabilities assumed. As final valuations are performed, increases or decreases in the fair value of assets acquired and liabilities assumed will result in adjustments, which may be material, to the balance sheet and/or statement of income.

As required, the unaudited pro forma condensed combined consolidated financial data includes adjustments which give effect to the events that are directly attributable to the Merger, expected to have a continuing impact and are factually supportable. We expect that we will incur reorganization and restructuring expenses as a result of combining our companies. We also anticipate that the Merger will provide the combined company with financial benefits that include reduced operating expenses (as compared to the sum of expenses from each company while operating separately) and the opportunity to earn more revenue. The pro forma information does not take into account these expected expenses or anticipated financial benefits, and does not attempt to predict or suggest future results.

The unaudited pro forma condensed combined consolidated financial statements are provided for informational purposes only and are subject to a number of uncertainties and assumptions and do not purport to represent what the companies actual performance or financial position would have been had the Merger occurred on the dates indicated and does not purport to indicate the financial position or results of operations as of any date or for any future period.

Please refer to the following information in conjunction with the accompanying notes to these pro forma financial statements and the historical financial statements and the accompanying notes thereto and the section MANAGEMENT S DISCUSSION AND ANALYSIS OF MIDDLEFIELD S FINANCIAL CONDITION AND RESULTS OF OPERATIONS in this joint proxy statement/prospectus.

The unaudited pro forma stockholders equity and net income are qualified by the statements set forth under this caption and should not be considered indicative of the market value of Middlefield common stock or the actual or future results of operations of Middlefield for any period. Actual results may be materially different from the pro forma information presented.

Table of Contents**UNAUDITED PRO FORMA COMBINED CONSOLIDATED CONDENSED BALANCE SHEET****AS OF SEPTEMBER 30, 2016**

(Dollars in Thousands, Except Per Share Amounts)

| | HISTORICAL | | | | |
|---|--------------------|---------------------------|------------------------------|----------|---------------------------|
| | Middlefield | | | | |
| | Banc Corp. | Liberty Bank, N.A. | Pro Forma Adjustments | | Combined Pro Forma |
| ASSETS | | | | | |
| Cash and due from banks | \$ 21,976 | \$ 22,804 | \$ (2,933) | A | \$ 32,578 |
| | | | (1,536) | B | |
| | | | (7,166) | C | |
| | | | (567) | D | |
| Fed funds sold | 1,300 | | | | 1,300 |
| Cash and cash equivalents | 23,276 | 22,804 | (12,202) | | 33,878 |
| Investment securities available for sale, at fair value | 123,054 | | (580) | E | 122,474 |
| Loans held for sale | 880 | 358 | | | 1,238 |
| Loans | 586,329 | 197,400 | (3,860) | F | 779,869 |
| Less allowance for loan and lease losses | 6,334 | 3,276 | (3,276) | G | 6,334 |
| Net loans | 579,995 | 194,124 | (584) | | 773,535 |
| Premises and equipment, net | 9,921 | 358 | | | 10,279 |
| Goodwill | 4,559 | | 11,651 | H | 16,210 |
| Core deposit intangibles | 46 | | 582 | I | 628 |
| Bank owned life insurance | 13,438 | 1,653 | | | 15,091 |
| Other real estate owned | 1,205 | | | | 1,205 |
| Accrued interest and other assets | 5,884 | 2,171 | 79 | J | 8,134 |
| TOTAL ASSETS | \$ 762,258 | \$ 221,468 | \$ (1,054) | | \$ 982,672 |
| LIABILITIES | | | | | |
| Noninterest-bearing demand | \$ 136,320 | \$ 29,515 | | | \$ 165,835 |
| Interest-bearing demand | 67,061 | 30,197 | | | 97,258 |
| Money market | 77,774 | 82,886 | | | 160,660 |
| Savings | 173,272 | 9,953 | | | 183,225 |
| Time | 184,915 | 35,689 | 224 | K | 220,828 |
| Total deposits | 639,342 | 188,240 | 224 | | 827,806 |
| Short-term borrowings | 32,803 | | | | 32,803 |
| Other borrowings | 9,713 | | 12,000 | L | 21,713 |
| Accrued interest and other liabilities | 2,208 | 1,806 | | | 4,014 |
| TOTAL LIABILITIES | \$ 684,066 | \$ 190,046 | \$ 12,224 | | \$ 886,336 |

| EQUITY | | | | | |
|--|------------|------------|-------------|----------|------------|
| Common stock | \$ 47,812 | \$ 9,603 | \$ (9,603) | M | \$ 66,119 |
| | | | 18,307 | N | |
| Surplus / additional paid in capital | | 16,977 | (16,977) | M | |
| Retained earnings | 40,282 | 4,842 | (4,842) | M | 40,119 |
| | | | (567) | D | |
| | | | 404 | E | |
| Accumulated other comprehensive income | 3,616 | | | | 3,616 |
| Treasury stock | (13,518) | | | | (13,518) |
| TOTAL STOCKHOLDERS EQUITY | \$ 78,192 | \$ 31,422 | \$ (13,278) | | \$ 96,336 |
| TOTAL LIABILITIES AND STOCKHOLDERS EQUITY | | | | | |
| | \$ 762,258 | \$ 221,468 | \$ (1,054) | | \$ 982,672 |

See accompanying notes to the unaudited pro forma condensed combined consolidated financial statements.

Table of Contents**UNAUDITED PRO FORMA COMBINED CONSOLIDATED CONDENSED STATEMENT OF INCOME
FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2016**

(Dollars in Thousands, Except Per Share Amounts)

| | HISTORICAL | | | | Combined Pro Forma |
|--|---------------------------------------|-------------------------------|----------------------------------|----------|-----------------------------------|
| | Middlefield Banc Corp. | Liberty Bank, N.A. | Pro Forma Adjustments | | |
| INTEREST INCOME | | | | | |
| Interest and fees on originated loans | \$ 18,949 | \$ 7,202 | \$ 271 | F | \$ 26,422 |
| Interest-bearing deposits in other institutions | 42 | 119 | | | 161 |
| Federal funds sold | 16 | | | | 16 |
| Investment securities: | 3,092 | | | | 3,092 |
| Dividends on stock | 74 | 34 | | | 108 |
| Total interest income | 22,173 | 7,355 | 271 | | 29,799 |
| INTEREST EXPENSE | | | | | |
| Deposits | 2,665 | 621 | (146) | K | 3,140 |
| Short-term borrowings | 282 | | | | 282 |
| Other borrowings | 53 | | 348 | L | 401 |
| Trust preferred securities | 117 | | | | 117 |
| Total interest expense | 3,117 | 621 | 202 | | 3,940 |
| Net interest income | 19,056 | 6,734 | 69 | | 25,859 |
| Provision for loan losses | 315 | | | | 315 |
| Net interest income after provision for loan and lease losses | 18,741 | 6,734 | 69 | | 25,544 |
| NONINTEREST INCOME | | | | | |
| Service charges on deposit accounts | 1,443 | 240 | | | 1,683 |
| Investment securities gains, net | 303 | | | | 303 |
| Earnings on bank-owned life insurance | 298 | 27 | | | 325 |
| Gains on sale of loans | 322 | 530 | | | 852 |
| Other income | 693 | 285 | | | 978 |
| Total noninterest income | 3,059 | 1,082 | | | 4,141 |
| NONINTEREST EXPENSE | | | | | |
| Salaries and employee benefits | 7,740 | 3,258 | | | 10,998 |
| Occupancy expense | 933 | 390 | | | 1,323 |
| Equipment expense | 700 | 152 | | | 852 |

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| | | | | | |
|--|-----------------|-----------------|--------------|----------|-----------------|
| Data processing costs | 928 | 315 | | | 1,243 |
| Core deposit intangible amortization | 30 | | 50 | I | 80 |
| Other expense | 5,584 | 1,185 | | | 6,769 |
| Total noninterest expense | 15,915 | 5,300 | 50 | | 21,265 |
| Income before taxes | 5,885 | 2,516 | 19 | | 8,420 |
| Income taxes | 1,129 | 856 | 7 | O | 1,992 |
| NET INCOME | \$ 4,756 | \$ 1,660 | \$ 12 | | \$ 6,428 |
| Less: Income attributable to common stock subject to possible conversion | | | | | |
| Pro forma net income attributable to common stock not subject to possible conversion | \$ 4,756 | \$ 1,660 | \$ 12 | | \$ 6,428 |
| Pro forma net income per common share basic | \$ 2.31 | \$ 1.73 | | | \$ 2.59 |
| Pro forma net income per common share diluted | 2.30 | 1.71 | | | 2.58 |
| Weighted average number of shares outstanding basic | 2,059,656 | 959,115 | 515,695 | N | 2,480,352 |
| Weighted average number of shares outstanding diluted | 2,068,532 | 969,433 | 515,695 | N | 2,488,874 |

See accompanying notes to the unaudited pro forma condensed combined financial statements.

Table of Contents**UNAUDITED PRO FORMA COMBINED CONSOLIDATED CONDENSED STATEMENT OF INCOME
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2015**

(Dollars in Thousands, Except Per Share Amounts)

| | HISTORICAL | | | | Combined Pro Forma |
|--|---------------------------------------|-------------------------------|----------------------------------|----------|-----------------------------------|
| | Middlefield Banc Corp. | Liberty Bank, N.A. | Pro Forma Adjustments | | |
| INTEREST INCOME | | | | | |
| Interest and fees on originated loans | \$ 23,824 | \$ 8,282 | \$ 359 | F | \$ 32,465 |
| Interest-bearing deposits in other institutions | 33 | 91 | | | 124 |
| Federal funds sold | 13 | | | | 13 |
| Investment securities: | 4,627 | | | | 4,627 |
| Dividends on stock | 98 | 66 | | | 164 |
| Total interest income | 28,595 | 8,439 | 359 | | 37,393 |
| INTEREST EXPENSE | | | | | |
| Deposits | 3,426 | 950 | (167) | K | 4,209 |
| Short-term borrowings | 194 | | | | 194 |
| Other borrowings | 83 | | 464 | L | 547 |
| Trust preferred securities | 117 | | | | 117 |
| Total interest expense | 3,820 | 950 | 297 | | 5,067 |
| Net interest income | 24,775 | 7,489 | 62 | | 32,326 |
| Provision for loan losses | 315 | | | | 315 |
| Net interest income after provision for loan and lease losses | 24,460 | 7,489 | 62 | | 32,011 |
| NONINTEREST INCOME | | | | | |
| Service charges on deposit accounts | 1,874 | 282 | | | 2,156 |
| Investment securities gains, net | 323 | | | | 323 |
| Earnings on bank-owned life insurance | 624 | 54 | | | 678 |
| Gains on sale of loans | 329 | 476 | | | 805 |
| Other income | 894 | 330 | | | 1,224 |
| Total noninterest income | 4,044 | 1,142 | | | 5,186 |
| NONINTEREST EXPENSE | | | | | |
| Salaries and employee benefits | 9,751 | 3,703 | | | 13,454 |
| Occupancy expense | 1,253 | 493 | | | 1,746 |
| Equipment expense | 944 | 212 | | | 1,156 |

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| | | | | | |
|--|-----------------|-----------------|---------------|----------|-----------------|
| Data processing costs | 1,071 | 418 | | | 1,489 |
| Core deposit intangible amortization | 40 | | 67 | I | 107 |
| Other expense | 7,018 | 1,070 | | | 8,088 |
| Total noninterest expense | 20,077 | 5,896 | 67 | | 26,040 |
| Income before taxes | 8,427 | 2,735 | (5) | | 11,157 |
| Income taxes | 1,562 | 943 | (2) | O | 2,503 |
| NET INCOME | \$ 6,865 | \$ 1,792 | \$ (3) | | \$ 8,654 |
| Less: Income attributable to common stock subject to possible conversion | \$ | \$ | \$ | | \$ |
| Pro forma net income attributable to common stock not subject to possible conversion | \$ 6,865 | \$ 1,792 | \$ (3) | | \$ 8,654 |
| Pro forma net income per common share basic | \$ 3.41 | \$ 1.88 | | | \$ 3.42 |
| Pro forma net income per common share diluted | 3.39 | 1.86 | | | 3.41 |
| Weighted average number of shares outstanding basic | 2,014,966 | 954,033 | 515,695 | N | 2,530,130 |
| Weighted average number of shares outstanding diluted | 2,024,120 | 962,091 | 515,695 | N | 2,539,284 |

See accompanying notes to the unaudited pro forma condensed combined financial statements.

Table of Contents**Notes to Unaudited Pro Forma Condensed Combined Consolidated Balance Sheets and Income Statements****(Dollars in thousands)****1) Description of the Merger and Basis of Preparation****The Merger**

Upon consummation of the Merger Middlefield Banc Corp. will continue to operate as a bank holding company under that name. Pursuant to the Reorganization Agreement, Liberty will merge with and into The Middlefield Banking Company, a subsidiary of Middlefield, with The Middlefield Banking Company being the surviving entity and remaining Middlefield's wholly owned subsidiary.

Basis of Presentation

The unaudited pro forma condensed combined consolidated financial statements have been prepared based on Middlefield's and Liberty's historical financial information. Certain disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States have been condensed or omitted as permitted by SEC rules and regulations.

These unaudited pro forma condensed combined consolidated financial statements are not necessarily indicative of the results of operations that would have been achieved had the Merger actually taken place at the dates indicated and do not purport to be indicative of future financial condition or operating results.

2) Acquisition Method

The pro forma condensed combined consolidated financial statements reflect the accounting for the transaction in accordance with ASC 805. Under the acquisition method, the purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values, with any excess of the purchase price over the estimated fair value of the identifiable net assets acquired recorded as goodwill.

The purchase price allocation for Liberty is summarized as follows (in thousands):

| | |
|---|---------------|
| Cash to holders of Liberty common stock | \$ 19,166 |
| Value of Liberty common stock owned by Middlefield | 984 |
| Middlefield common stock to holders of Liberty common stock | 18,307 |
| Total purchase price | 38,457 |
| Allocated to: | |
| Historical book value of Liberty's assets and liabilities | 31,422 |
| Pre-closing special dividend to Liberty's common stockholders | (2,933) |
| Pre-closing cash out of existing Liberty stock options | (1,536) |
| Historical book value of Liberty's assets and liabilities to be allocated | 26,953 |

To adjust Liberty's assets and liabilities to fair value:

| | |
|---|-----------|
| Loans | (3,860) |
| Elimination of allowance for loan and lease losses | 3,276 |
| Core deposit intangible | 582 |
| Net deferred tax asset | 79 |
| Time deposits | (224) |
| Total allocation of purchase price | (147) |
| Excess of purchase price over allocation of identifiable assets and liabilities | \$ 11,651 |

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- A. Represents payment of special dividend to Liberty common stockholders prior to execution of the transaction.

| | |
|------------------------------------|-----------------|
| Special dividend per share | \$ 3.13 |
| Outstanding number of shares | 960,273 |
| Total special dividends | \$ 3,006 |
| Liberty shares held by Middlefield | 23,218 |
| Special dividends paid in cash | \$ 2,933 |

- B. Represents cashing out of existing Liberty stock options and phantom stock.

| | |
|---|-----------------|
| Special dividend per share | \$ 3.13 |
| Consideration per share (market value of \$35.50, 1.1934 exchange rate) | 42.37 |
| Total consideration per share | \$ 45.50 |
| Stock options and phantom stock weighted average strike price | 28.54 |
| Cash out of options and phantom stock per share | 16.96 |
| Stock options and phantom stock outstanding | 90,571 |
| Total option and phantom stock consideration | \$ 1,536 |

- C. Represents the cash component of the purchase price.

| | |
|----------------------------------|------------------|
| Cash consideration per share | \$ 37.96 |
| Outstanding number of shares | 960,273 |
| Anticipated cash conversion rate | 52.58% |
| Total cash consideration | \$ 19,166 |
| Cash proceeds from new debt | 12,000 |
| Net cash outflow | \$ 7,166 |

- D. Represents payment of \$872 of fees to financial advisors, net of 35% anticipated tax effect, payable upon the closing of the acquisition. The fees are non-recurring items directly attributable to the closing of the transaction and are not expected to have a continuing impact on operations and therefore are not included in the Unaudited Pro Forma Statement of Income.

- E. Reflects elimination of Middlefield's minority investment in Liberty, carried at \$580, and related gain realized as a result of the transaction.

| | |
|---|--------|
| Carrying value of Liberty stock | \$ 580 |
| Closing price of common stock as of November 16, 2016 | 35.50 |
| Liberty shares held by Middlefield | 23,218 |
| Fixed exchange ratio of common stock | 1.1934 |
| Middlefield realized gain on Liberty stock | \$ 404 |

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- F. Reflects the pro forma purchase accounting adjustment of Liberty's loan portfolio to fair value. The preliminary fair value adjustment will be accreted over the loans' remaining life on a level yield basis. The initial pro forma amount recorded to the balance sheet as of the acquisition date and subsequent accretion, including the related impact to the provision for loan losses, are as follows:

| | |
|--|------------|
| Book value: | \$ 197,400 |
| Fair value: | 193,540 |
| Fair value adjustment: | (3,860) |
| Accretion: | |
| For the year ended December 31, 2015 | 359 |
| For the nine months ended September 30, 2016 | 271 |

- G. Represents elimination of Liberty's allowance for loan and lease losses of \$3,276 as of the acquisition date.
- H. Reflects the pro forma adjustment to goodwill of \$11,651, representing the excess of the purchase price over the fair value of net assets to be acquired.
- I. Reflects the pro forma impact of the core deposit intangible asset of Liberty. The preliminary fair value adjustment will be amortized over ten years on an accelerated basis. The initial pro forma amount recorded to the balance sheet as of the acquisition date and subsequent amortization are as follows:

| | |
|--|--------|
| Fair value: | \$ 582 |
| Amortization: | |
| For the year ended December 31, 2015 | 67 |
| For the nine months ended September 30, 2016 | 50 |

- J. Reflects creation of a net deferred tax asset resulting from purchase accounting adjustments, estimating a 35% tax rate.
- K. Reflects the pro forma purchase accounting adjustment of Liberty's time deposits to fair value. The preliminary fair value adjustment will be accreted over the life of the time deposits on a level yield basis. The initial pro forma amount recorded to the balance sheet as of the acquisition date and subsequent accretion are as follows:

| | |
|------------------------|-----------|
| Book value: | \$ 35,689 |
| Fair value: | 35,913 |
| Fair value adjustment: | 224 |
| Accretion: | |

| | |
|--|-----|
| For the year ended December 31, 2015 | 167 |
| For the nine months ended September 30, 2016 | 146 |

- L. Reflects new Middlefield debt of \$12,000 at a blended interest rate of 3.86% utilized to finance the transaction. Borrowings include an \$8,000 facility at 3.78% (1-month LIBOR plus 325 basis points) and a \$4,000 facility at 4.03% (1-month LIBOR plus 350 basis points).

- M. Reflects the elimination of Liberty's historical net equity of approximately \$31,422 as a result of the acquisition.

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N. Represents the common stock component of the purchase price.

| | |
|---|-----------|
| Closing price of common stock as of November 16, 2016 | \$ 35.50 |
| Outstanding number of shares | 960,273 |
| Fixed exchange ratio of common stock | 1.1934 |
| Anticipated stock conversion rate | 45.00% |
| | |
| Total stock consideration | \$ 18,307 |
| New shares of common stock issued | 515,695 |

O. Reflects tax impact of accretion and amortization of purchase accounting adjustments, assuming a 35% tax rate.

Table of Contents**UNAUDITED COMPARATIVE PER SHARE DATA**

The following table summarizes selected share and per share information about Middlefield and Liberty, giving effect to the Merger (known as pro forma information). The data in the table should be read together with the financial information and the financial statements of Middlefield and Liberty incorporated by reference or included in this joint proxy statement/prospectus. The pro forma information is presented as an illustration only, does not represent actual combined financial position per share or combined results of operations per share, and is not a forecast of the combined financial position or combined results of operations for any future period.

The information about book value per share and shares outstanding assumes that the Merger took place as of the dates presented and is based on the assumptions set forth in the preceding unaudited pro forma condensed combined consolidated balance sheets. The information about dividends and earnings per share assumes that the Merger took place as of the beginning of the periods presented and is based on the assumptions set forth in the preceding unaudited pro forma condensed combined consolidated income statements. No pro forma adjustments have been included to reflect potential effects of the Merger related to integration expenses, cost savings, or operational synergies Middlefield expects by combining the operations of Middlefield and Liberty, or to reflect the costs of combining the companies and their operations other than Merger-related expenses. It is further assumed that Middlefield will pay a cash dividend after completion of the Merger at the annual rate of \$1.20 per share. The actual payment of dividends is subject to numerous factors, and no assurance can be given that Middlefield will pay dividends after the Merger or that dividends will not be reduced in the future.

| | Middlefield Historical | Liberty Historical | Pro Forma Combined (1)(2) | Equivalent Pro Forma Liberty (4) |
|--------------------------------------|-----------------------------------|-------------------------------|--------------------------------------|---|
| Basic Net Income Per Share | | | | |
| Nine Months Ended September 30, 2016 | 2.31 | 1.73 | 2.59 | 3.09 |
| Diluted Income Per Share | | | | |
| Nine Months Ended September 30, 2016 | 2.30 | 1.71 | 2.58 | 3.08 |
| Dividends Declared Per Share | | | | |
| Nine Months Ended September 30, 2016 | 0.81 | 0.60 | 0.68 | 0.81 |
| Book Value Per Share | | | | |
| September 30, 2016 | 34.80 | 32.72 | 34.87 | 41.62 |

| | Middlefield Historical | Liberty Historical | Pro Forma Combined (1)(2) | Equivalent Pro Forma Liberty (4) |
|-------------------------------------|-----------------------------------|-------------------------------|--------------------------------------|---|
| Basic Net Income Per Share | | | | |
| Year Ended December 31, 2015 | 3.41 | 1.88 | 3.42 | 4.08 |
| Diluted Income Per Share | | | | |
| Year Ended December 31, 2015 | 3.39 | 1.86 | 3.41 | 4.07 |
| Dividends Declared Per Share | | | | |
| Year Ended December 31, 2015 | 1.07 | 0.60 | 1.08 | 1.29 |
| Book Value Per Share | | | | |
| December 31, 2015 | 33.19 | 31.59 | 33.62 | 40.12 |

(1)

The pro forma combined book value per share of Middlefield common stock is based on the pro forma combined common stockholders' equity for the merged entities divided by total pro forma shares of the combined entities.

- (2) Pro forma dividends per share represent Middlefield historical dividends per share.
- (3) The pro forma combined diluted net income per share of Middlefield common stock is based on the pro forma combined diluted net income for the merged entities divided by total pro forma diluted shares of the combined entities.
- (4) Represents the Pro Forma Combined information multiplied by the 1.1934 exchange ratio.

Table of Contents**MARKET PRICE AND DIVIDEND INFORMATION**

Middlefield's common stock trades on the Nasdaq Capital Market under the symbol MBCN. Liberty's common stock does not trade in an established market. Trades in Liberty common stock that occur are the result of direct, private negotiation between buyers and sellers. Accordingly, the management of Liberty does not have information with respect to the price at which all of its common stock has traded. Liberty has 272 stockholders of record.

Liberty paid total cash dividends on its common stock of \$0.60 per share in 2015 and \$0.40 per share for the first six months of 2016. Liberty has not declared any stock dividends on its common stock during the two most recently completed fiscal years.

A summary of the high and low bid prices of and cash dividends paid on Middlefield common stock for the first nine months of 2016 and for the 2015 and 2014 fiscal years follows. This information does not reflect retail mark-up, markdown or commissions, and does not necessarily represent actual transactions.

| | High Bid | Low Bid | Dividend |
|----------------|-----------------|----------------|-----------------|
| 2014 | | | |
| First Quarter | 28.00 | 26.00 | 0.26 |
| Second Quarter | 30.50 | 27.05 | 0.26 |
| Third Quarter | 35.70 | 28.55 | 0.26 |
| Fourth Quarter | 34.50 | 33.00 | 0.26 |
| 2015 | | | |
| First Quarter | 34.82 | 31.50 | 0.26 |
| Second Quarter | 33.65 | 31.60 | 0.27 |
| Third Quarter | 34.00 | 30.20 | 0.27 |
| Fourth Quarter | 34.75 | 28.90 | 0.27 |
| 2016 | | | |
| First Quarter | 34.00 | 30.00 | 0.27 |
| Second Quarter | 33.00 | 30.00 | 0.27 |
| Third Quarter | 33.95 | 31.35 | 0.27 |

On July 27, 2016, the last trading day before the Merger was announced, the closing price of Middlefield common stock was \$33.74. The closing price was \$ on the more recent date of , 2016. The table to follow presents the implied value of Liberty common stock based on those prices for Middlefield common stock and the 1.1934 fixed exchange ratio. We can give no assurance of what the market price of Middlefield common stock will be if and when the Merger is completed.

| | |
|--|---|
| closing price of Middlefield common stock on Nasdaq | implied value per share of Liberty common stock at the 1.1934 fixed exchange |
|--|---|

| | | ratio |
|---------------|-------|--------------|
| July 27, 2016 | 33.74 | 40.27 |
| , 2016 | | |

Table of Contents**RISK FACTORS**

This RISK FACTORS section identifies some of the significant factors that make investment in Middlefield common stock speculative or risky, but it does not purport to present an exhaustive description of all significant risks. You should carefully consider the following risk factors before you decide how to vote concerning the proposals presented in this joint proxy statement/prospectus. You should also consider the other information in this joint proxy statement/prospectus, including but not limited to the section captioned FORWARD-LOOKING STATEMENTS, and information in any documents incorporated by reference in this joint proxy statement/prospectus. See WHERE YOU CAN FIND MORE INFORMATION in the forepart of this document

Because the market value of Middlefield common stock fluctuates, Liberty stockholders cannot be sure of the value of the stock portion of the Merger consideration they may receive.

Approximately 45% of the Liberty shares of common stock exchanged in the Merger will be exchanged for Middlefield common stock, and the remaining Liberty shares of common stock exchanged in the Merger (approximately 55%) will be exchanged for cash. This does not take into account the special dividend of approximately \$3.0 million, to be declared before closing of the Merger. The cash portion of the Merger consideration is fixed at \$37.96 per share, and the stock portion also is fixed at 1.1934 shares of Middlefield common stock for each share of Liberty common stock exchanged for stock. Changes in the price of Middlefield common stock before the Merger is completed will affect the value of the stock portion of the Merger consideration. Changes may result from many factors, including but not limited to general market and economic conditions and changes in Middlefield's business, operations, and prospects. Therefore, when Liberty stockholders vote on the Merger they will not know the final aggregate value of the Merger consideration to be received. Liberty stockholders should obtain current sale prices for Middlefield common stock before voting at the Liberty annual meeting.

You may receive a form of consideration different from the form of consideration you elect

Under the terms of the Reorganization Agreement, stockholders of Liberty will be entitled to receive, for each share of Liberty common stock: (i) \$37.96 in cash, or (ii) 1.1934 Middlefield common shares, or (iii) a combination of both. The form of consideration to be received by each Liberty stockholder is subject to reallocation in order to ensure that approximately 45% of the Liberty shares of common stock exchanged in the merger will be exchanged for Middlefield's common shares and 55% of the Liberty shares of common stock exchanged in the merger will be exchanged for cash. The Reorganization Agreement contains proration and allocation methods to achieve this result. If you elect to receive all cash and the available cash is oversubscribed, then you may receive a portion of the Merger consideration in the form of Middlefield common shares. If you elect to receive all Middlefield common shares and the available common shares are oversubscribed, then you may receive a portion of the Merger consideration in cash. If you elect a combination of cash and Middlefield's common shares, you may not receive the specific combination you request.

Middlefield could experience difficulties managing its growth and effectively integrating the operations of Liberty.

The earnings, financial condition and prospects of Middlefield after the Merger will depend in part on Middlefield's ability to integrate successfully the operations of Liberty and continue to implement Middlefield's business plan. Middlefield may not be able to fully achieve its strategic objectives and projected operating efficiencies. The costs or difficulties of integrating Liberty with the Middlefield organization may be greater than expected or the cost savings from anticipated economies of scale of the combined organization may be lower or take longer to realize than expected. Inherent uncertainties exist in integrating the operations of an acquired entity, and Middlefield may encounter difficulties, including but not limited to loss of key employees and customers, disruption of its ongoing

business, or possible inconsistencies in standards, controls, procedures, and policies. These factors could contribute to Middlefield not fully achieving its anticipated benefits of the Merger.

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The Reorganization Agreement limits Liberty's ability to pursue alternatives to the Merger.

With limited exceptions, the Reorganization Agreement prohibits Liberty from soliciting, negotiating, or providing confidential information to any third party relating to competing proposals for acquisition of Liberty. In addition, Liberty must pay \$1.65 million to Middlefield for termination of the Reorganization Agreement if (a) Middlefield terminates the Reorganization Agreement because Liberty accepts another acquisition proposal, or withdraws its recommendation or fails to recommend to the stockholders adoption of the Reorganization Agreement, or breaches the prohibition against soliciting other acquisition proposals, or (b) Liberty terminates the Reorganization Agreement with the intention of accepting an alternate, superior proposal. Liberty's obligation to make the payment could discourage another company from making a competing proposal.

The circumstances of Liberty and Middlefield may have changed since the date of the fairness opinions obtained from Liberty's and Middlefield's financial advisors.

Liberty's board of directors received an opinion dated July 27, 2016 from its financial advisor and Middlefield's board received a July 27, 2016 opinion from its financial advisor concerning the fairness of the Merger consideration from a financial point of view. Subsequent changes in the operation and prospects of Liberty or Middlefield, changes in general market and economic conditions, and other factors that may be beyond the control of Liberty or Middlefield could significantly alter the value of Liberty or Middlefield or the price of Middlefield common stock by the time the Merger is completed. The opinions state that the Merger consideration is fair from a financial point of view on the date of the opinion, not as of the date the Merger is finally completed or as of any other date. The opinion of Liberty's financial advisor is attached as Annex C to this joint proxy statement/prospectus. The opinion of Middlefield's financial advisor is attached as Annex D. For a description of the opinions, see *THE MERGER Opinion of Liberty's Financial Advisor* on page 55 and *THE MERGER Opinion of Middlefield's Financial Advisor* on page 63 of this joint proxy statement/prospectus.

Middlefield and Liberty stockholders will have a reduced ownership and voting interest after the Merger and will exercise less influence over management of the combined organization.

The Merger will dilute the ownership position of Middlefield stockholders and result in Liberty's stockholders having an ownership stake in the combined company that is smaller than their current 100% stake in Liberty. Upon completion of the Merger, we estimate that continuing Middlefield stockholders will own approximately 80% of the issued and outstanding common stock of Middlefield, while former Liberty stockholders will own approximately 20%. Middlefield stockholders and Liberty stockholders will therefore have less influence over the management and policies of the post-Merger organization than they currently have.

Failure to complete the Merger could adversely affect the value of Liberty common stock and future businesses and financial results of both Middlefield and Liberty.

If the Merger is not completed, the ongoing businesses of Middlefield and Liberty could be adversely affected. Middlefield and Liberty would be subject to several risks, including:

Middlefield and Liberty will have to pay costs even if the Merger is not completed, such as legal, accounting, financial advisor, and printing fees,

under the Reorganization Agreement, Liberty is subject to restrictions regarding the conduct of its business before completing the Merger, which could adversely affect Liberty's ability to execute business strategies, and

the Merger requires substantial commitments of time and resources by Middlefield and Liberty management, which would instead be devoted to other opportunities that could be beneficial to Middlefield and Liberty as independent companies.

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In addition, if the Merger is not completed, Middlefield and Liberty may experience negative reactions from their respective customers and employees. Employees could resign and obtain other employment as a result of the potential Merger or failure to complete the Merger. Middlefield or Liberty also could be subject to litigation related to failure to complete the Merger.

The Middlefield common stock received by Liberty stockholders upon completion of the Merger will have different rights from Liberty shares.

When the Merger is completed, Liberty stockholders receiving the stock form of Merger consideration will no longer be stockholders of Liberty but will instead be Middlefield stockholders, with rights governed by the Ohio Revised Code and Middlefield's articles of incorporation and regulations, which are in some respects materially different from the terms of Liberty's Bylaws and Amended and Restated Articles of Association. See *COMPARISON OF RIGHTS OF LIBERTY AND MIDDLEFIELD STOCKHOLDERS* on page 91 of this joint proxy statement/prospectus.

Liberty directors and certain of Liberty's officers have interests that are different from, or in addition to, interests of Liberty's stockholders generally.

The directors and certain executive officers of Liberty have interests in the Merger that are different from, or in addition to, the interests of Liberty stockholders generally. These interests include covenants in the Reorganization Agreement providing for the election of two current Liberty directors (Messrs. Valerian and Bevan), to the Middlefield board of directors immediately after the Merger is consummated, indemnification and insurance for directors and officers of Liberty for events occurring before the Merger as well as the possible formation of a Northeast Ohio Advisory Board that would include some current Liberty directors. In addition, the Reorganization Agreement provides for retention payments to be made to certain officers and the payment of amounts due under employment agreements with Liberty's Chairman and President and with its Chief Operating Officer and Chief Financial Officer.

Liberty will be subject to business uncertainties and contractual restrictions while the Merger is pending.

Uncertainty about the effect of the Merger on employees and customers may have an adverse effect on Liberty and consequently on Middlefield. These uncertainties may impair Liberty's ability to attract, retain and motivate key personnel until the Merger is consummated, and could cause customers and others that deal with Liberty to seek to change existing business relationships with Liberty. Retention of certain employees may be challenging during the pendency of the Merger, as certain employees may experience uncertainty about their future roles with Middlefield. If key employees depart because of issues relating to the uncertainty and difficulty of integration or a desire not to remain with Middlefield, Middlefield's business following the Merger could be harmed. In addition, the Reorganization Agreement restricts Liberty from making certain acquisitions and taking other specified actions until the Merger occurs without the consent of Middlefield. These restrictions may prevent Liberty from pursuing attractive business opportunities that may arise prior to the completion of the Merger. Please see the section entitled *THE REORGANIZATION AGREEMENT - Covenants and Agreements* beginning on page 79 of this proxy statement/prospectus for a description of the restrictive covenants to which Liberty is subject under the Reorganization Agreement.

Completion of the Merger is subject to many conditions and if these conditions are not satisfied or waived, the Merger will not be completed.

The obligation of Middlefield and Liberty to complete the Merger is subject to the fulfillment or written waiver of many conditions, including approval by the requisite vote of Middlefield and Liberty stockholders, absence of orders

prohibiting completion of the Merger, effectiveness of the registration statement of which this document is a part, approval for Nasdaq Stock Market (Nasdaq) listing of the Middlefield shares to be issued, continued accuracy of the representations and warranties of the parties, and performance by the parties of

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covenants and agreements. See *THE REORGANIZATION AGREEMENT Conditions to the Merger* on page 88 of this joint proxy statement/prospectus. These conditions to the consummation of the Merger might not be fulfilled, and the Merger therefore might not be completed. If the Merger is not completed by May 30, 2017 (or a later date the parties may agree to), either Middlefield or Liberty could choose not to proceed with the Merger. The parties also could mutually decide to terminate the Reorganization Agreement at any time, before or after approval by stockholders. In addition, Middlefield or Liberty could elect to terminate the Reorganization Agreement in other circumstances. See *THE REORGANIZATION AGREEMENT Termination; Termination Fee* on page 89 of this joint proxy statement/prospectus for details or refer to Article 10 of the Reorganization Agreement attached as Annex A.

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FORWARD-LOOKING STATEMENTS

This joint proxy statement/prospectus contains forward-looking statements, including statements about Middlefield's, Liberty's, and the post-Merger organization's financial condition, results of operations, earnings outlook, asset quality trends, and profitability. Forward-looking statements express Middlefield and Liberty management's current expectations or forecasts of future events. By their nature the forward-looking statements are subject to assumptions, risks, and uncertainties. Statements contained in this joint proxy statement/prospectus that are not statements of historical fact constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, or the Reform Act, even if the statements are not specifically identified as forward looking. In addition, statements in future filings of Middlefield with the SEC, in press releases, and in oral and written statements made by or with the approval of Middlefield or Liberty that are not statements of historical fact constitute forward-looking statements within the meaning of the Reform Act. Examples of forward-looking statements include but are not limited to:

statements about the benefits of the Merger, including future financial and operating results, cost savings, enhanced revenues, and accretion to reported earnings that may be realized from the Merger,

statements regarding plans, objectives, and expectations of Middlefield or Liberty or their respective management or boards of directors,

statements regarding future economic performance, and

statements regarding underlying assumptions.

Words such as believes, anticipates, expects, intends, targeted, continue, remain, will, should, may expressions are intended to identify forward-looking statements but are not the exclusive means of identifying forward-looking statements. Forward-looking statements are not guarantees of future performance. They involve certain risks, uncertainties, and assumptions that are difficult to predict with confidence. Therefore, actual outcomes and results could differ materially from what is expressed or forecasted in the forward-looking statements. Factors that could cause actual results to differ from those discussed in the forward-looking statements include but are not limited to:

the risk that the businesses of The Middlefield Banking Company and Liberty will not be integrated successfully or that integration is more difficult, time-consuming, or costly than expected,

the risk that revenue synergies and cost savings from the Merger are not fully realized or are not realized within the expected time frame,

the risk that post-Merger revenues or earnings are lower than expected,

deposit attrition, operating costs, customer loss, business disruption, or employee loss after the Merger could be greater than anticipated,

failure of Middlefield or Liberty stockholders to approve the Merger,

local, regional, national, and international economic conditions and the impact they may have on The Middlefield Banking Company and Liberty and their customers and Middlefield's and Liberty's assessments of that impact,

changes in the level of non-performing assets, delinquent loans, and charge-offs,

material changes in the value of Middlefield common stock,

changes in estimates of future loan loss reserve requirements based upon periodic review in accordance with regulatory and accounting requirements,

the risk that management's assumptions and estimates used in applying critical accounting policies prove unreliable, inaccurate, or not predictive of actual results,

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inflation, interest rate, securities market, and monetary fluctuations,

changes in interest rates, spreads on earning assets and interest-bearing liabilities, and interest rate sensitivity,

competitive pressures among depository and other financial institutions could increase and adversely affect pricing, spending, third-party relationships, and revenues,

changes in applicable laws and regulations (including laws and regulations concerning taxes, banking, and securities),

the effects of and changes in trade, monetary, and fiscal policies and laws, including interest rate policies of the Federal Reserve,

legislation affecting the financial services industry as a whole, and/or Middlefield and its subsidiaries, individually or collectively,

governmental and public policy changes, and

the impact of various domestic or international military or terrorist actions or conflicts.

All subsequent written and oral forward-looking statements concerning the proposed transaction or other matters and attributable to Middlefield or Liberty or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements made or referred to above. Forward-looking statements are made only as of the date on which they are made. Middlefield and Liberty are not undertaking to update forward-looking statements.

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THE ANNUAL MEETING OF LIBERTY STOCKHOLDERS

Time, Date and Place

This joint proxy statement/prospectus is provided to Liberty stockholders by Liberty's board of directors for solicitation of proxies to be used at the annual meeting of stockholders. The annual meeting will be held at 9:00 a.m. local time on December 22, 2016 at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio 44128, including any adjournment. This joint proxy statement/prospectus is also being furnished by Middlefield to Liberty stockholders as a prospectus for issuance of Middlefield common stock in the proposed Merger.

Matters to be Considered

Liberty stockholders will be asked at the annual meeting to consider and vote upon proposals to

adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement,

adjourn the meeting to allow solicitation of additional proxies if there are insufficient votes at the meeting to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement,

elect twelve directors to serve until the earlier of (i) completion of the Merger or (ii) Liberty's 2017 annual meeting and until their successors are elected and qualified,

ratify the appointment of Maloney + Novotny LLC as independent public accountants for the fiscal year ending December 31, 2016, and

transact any other business properly presented at the annual meeting or at any adjournment. Liberty's board of directors is not aware of any other business to be transacted at the meeting.

Liberty's board of directors believes the Merger with Middlefield is in the best interests of Liberty stockholders. The board recommends that you vote (1) **FOR** adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, (2) if the adjournment proposal is presented for a vote, **FOR** adjournment to allow additional proxy solicitation, (3) **FOR** election of the identified director nominees, and (4) **FOR** ratification of the selection of independent accountants.

Record Date; Shares Outstanding and Entitled to Vote

November 25, 2016 is the record date for determining Liberty stockholders entitled to vote at the annual meeting. Only holders of Liberty common stock at the close of business on the record date are entitled to vote at the meeting. As of the close of business on the record date there were _____ shares of Liberty common stock outstanding and entitled to vote. Liberty common stock is held of record by 272 stockholders. Each share of Liberty common stock entitles the holder to one vote on all matters properly presented at the meeting. Stockholders are not

entitled to vote cumulatively in the election of directors.

Votes Required; Quorum

Adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement require the affirmative vote of the holders of at least two-thirds of the shares of Liberty common stock outstanding. When the stockholder meeting is held, if there are insufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to approve adjournment. For the proposal to elect directors, directors are elected by plurality vote,

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which means the directors receiving the greatest numbers of votes are elected. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to ratify selection of Liberty's independent accountants.

If you are a Liberty stockholder and you do not return a proxy card or vote in person at the Liberty annual meeting or if you mark the proxy card or ballot **ABSTAIN** for the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, this will have the same effect as a vote **AGAINST** the proposal. Marking your proxy card or ballot **ABSTAIN** will have the same effect as a vote **AGAINST** the adjournment proposal and the auditor ratification proposal. Failure to return your proxy card or vote in person will have no effect on the adjournment proposal, the proposal to elect directors, or the proposal to ratify the auditor selection.

If you hold your Liberty stock in street name through a broker, bank, or other nominee, you must provide your broker, bank, or nominee with voting instructions. Under applicable FINRA and stock exchange rules, brokers who hold shares in street name for a beneficial owner are allowed to vote in their discretion on routine proposals, even without voting instructions from beneficial owners. For proposals stock exchanges consider non-routine, however, brokers are not allowed to exercise voting discretion and cannot vote on those non-routine proposals unless the beneficial owner gives specific voting instructions. Broker non-votes occur when a broker or nominee does not receive voting instructions from the beneficial owner. Except for the auditor ratification proposal, Liberty believes the proposals to be voted on at Liberty's annual meeting are non-routine and that brokers therefore will not be able to vote on those proposals without specific voting instructions. Therefore, if you hold Liberty shares in street name but do not give voting instructions to your broker, bank, or other nominee, the broker, bank, or other nominee may not vote your shares on the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, the proposal to adjourn the meeting, or the proposal to elect directors.

Broker non-votes will have the same effect as votes **AGAINST** the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement and the proposal to adjourn the meeting. Failing to give voting instructions also will prevent the broker, bank, or other nominee from voting on the director election proposal, but directors nevertheless will be elected because directors are elected by a plurality. Your broker, bank, or other nominee will be able to vote on the auditor selection proposal without voting instructions. Your broker, bank, or other nominee will provide you with a proxy card and directions for giving voting instructions. Please follow the broker, bank, or other nominee's directions to give voting instructions.

A quorum will exist at Liberty's annual meeting if a majority of the outstanding common stock is represented in person or by proxy. A quorum must be present in person or by proxy at the meeting before any action other than adjournment can be taken. A properly executed proxy card marked **ABSTAIN** will be counted for purposes of determining whether a quorum is present.

All of Liberty's directors agreed to vote their Liberty shares in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, in favor of the adjournment proposal and in favor of entering into Voting Agreements with Middlefield as a condition to Middlefield's agreement to enter into the Reorganization Agreement. Excluding Liberty shares held by their immediate family members, Liberty's directors collectively own 354,986 shares of Liberty common stock, or approximately 34.3% of the shares outstanding. As a holder of 23,218 shares of Liberty common stock, or 2.2%, Middlefield intends to vote in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated therein, in favor of the adjournment proposal if applicable, in favor of electing the director nominees identified in this joint proxy statement/prospectus, and in favor of ratifying the selection of independent auditors.

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Solicitation and Revocation of Proxies

A proxy card accompanies this joint proxy statement/prospectus. If you are a Liberty stockholder your proxy is being solicited by Liberty's board of directors. Regardless of whether you attend the annual meeting, the Liberty board of directors urges you to return your properly executed proxy card as soon as possible. If you return your properly executed proxy card before the meeting and do not revoke it, the shares of Liberty common stock represented by the proxy card will be voted at the annual meeting or adjournment.

The Liberty common stock will be voted as specified on the proxy card. If you are a Liberty stockholder and you sign, date, and return a proxy card without stating how you want your shares to be voted, your shares will be voted **FOR** adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, and if adjournment of the meeting is necessary to allow time for solicitation of additional proxies your shares will be voted **FOR** adjournment. Similarly, your shares will be voted **FOR** election of the identified director nominees and **FOR** ratification of the auditor selection if you return a valid proxy card without giving voting instructions. Although Liberty's board currently does not expect any other proposals to be presented at the meeting, if any other proposals are properly presented the Liberty common stock represented by properly executed proxy cards will, to the extent permitted by applicable law, be voted in the discretion of the persons named in the proxy card in accordance with their best judgment.

If you return a properly executed proxy card, you may revoke it at any time before a vote is taken at the meeting by:

filing a written notice of revocation with Richard C. Ebner, Secretary of Liberty, at 25201 Chagrin Boulevard, Suite 120, Beachwood, Ohio 44122,

executing and returning another proxy card with a later date, or

attending the meeting and giving notice of revocation in person.

Attending Liberty's annual meeting will not, by itself, revoke your proxy. If you instructed your broker, bank, or other nominee to vote your shares but you wish to change or revoke those voting instructions, you must follow your broker, bank, or other nominee's directions for changing or revoking your vote.

Liberty will bear its own cost of solicitation of proxies. Proxies will be solicited by mail and may also be solicited by personal contact, telephone, facsimile, or electronic mail by directors, officers, and employees, none of whom will receive additional compensation for their solicitation activities. Liberty will pay the standard charges and expenses of brokerage houses, voting trustees, banks, associations, and other custodians, nominees, and fiduciaries who are record holders of Liberty common stock not beneficially owned by them for forwarding this joint proxy statement/prospectus and other proxy solicitation materials to and obtaining voting instructions from the beneficial owners of Liberty common stock.

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PROPOSALS SUBMITTED TO LIBERTY STOCKHOLDERS

Director Election Proposal

The board of directors of Liberty, elected by Liberty's stockholders, oversees the business and management of Liberty. Members of the board monitor and evaluate Liberty's business performance through regular communication with the CEO and senior management, and by participating in board and board committee meetings. The Liberty board is committed to sound and effective corporate governance policies and high ethical standards. Under Liberty's Amended and Restated Articles of Association and By-Laws, the board must consist of at least 5 directors, but may not exceed 25 directors. The By-Laws provide that the number of directors constituting the board may be changed from time to time, either pursuant to a resolution adopted by a majority of the board, or pursuant to the affirmative vote of a majority of the stockholders present in person or by proxy at any meeting of stockholders which has as one of its purposes the election of directors, provided that a quorum is present. The board has fixed the number of authorized directors at thirteen (13). There is currently one vacancy on the board. The board will fill that vacancy when a suitable candidate is identified unless the Merger is consummated prior to that time. Twelve seats on the board are currently filled by the individuals identified as directors in the table below, each of whom has been nominated by the board for re-election. Each such nominee has consented to being named in this proxy statement and has agreed to serve if elected.

Term of Office

Each director serves for a term ending at the next Annual Meeting of Stockholders following his appointment or election as a director, and until his or her successor is elected and qualified. The term of each of Liberty's twelve current directors expires at the annual meeting, upon the election of their successors. The board has nominated the twelve current directors for re-election to the board for a term ending upon the earliest of the completion of the Merger, the 2017 annual meeting and until his successor is elected and qualified, or until he resigns or is otherwise removed and his successor is duly elected and qualified.

Nominations of Directors

Upon the recommendation of the Corporate Governance/Nominating Committee, the board has nominated the twelve individuals identified below for election as directors. The board believes that the qualifications and experience of the 2016 director nominees will contribute to an effective and well-functioning board. The board and the Corporate Governance/Nominating Committee believe that, individually and as a whole, the directors possess the necessary qualifications to provide effective oversight of Liberty's business and quality advice and counsel to Liberty's management.

Nominations of candidates for election as directors at the meeting are governed by Liberty's By-Laws. The By-Laws provide that such nominations may be made either by the board or by any stockholders entitled to vote at a meeting of stockholders at which directors are elected. The By-Laws require that such nominations, if not made by or on behalf of the board, be made in writing and delivered in person or mailed to Liberty's Secretary and to the Office of the Comptroller of the Currency (OCC) in Washington, D.C., not less than 14 days nor more than 50 days prior to such meeting. However, if less than 21 days' notice of such meeting is given to stockholders, such nominations shall be mailed or delivered to the Secretary and to the OCC not later than the close of business on the seventh day following the day on which the notice of meeting was given to stockholders. Notice of the meeting of Liberty's stockholders is deemed to be given on the date on which such notice is deposited in the United States mail. For the purpose of the herein notice with respect to the meeting, such date is _____, 2016.

Liberty's By-Laws further require that nominations for election as director, if not made by or on behalf of the board, set forth the name, address, and the number and class of Liberty common stock owned by the nominating stockholder, and must include all information relating to the proposed nominee that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended, including the proposed nominee's written consent to serve as a director if elected.

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Liberty's By-Laws provide that if the Chairman of the meeting determines that the nomination of any candidate for election as a director was not made in accordance with the By-Laws, then the Chairman may order that such nomination, and all votes cast for the election of such candidate, be disregarded.

Liberty expects that there will be one vacancy on the board following the meeting. In such event, it is the intention of the Board to consider qualified candidates for appointment to the board. As provided by the By-Laws of Liberty, a majority of the board then in office may fill a vacancy on the board.

Directors of Liberty

The following table identifies each director nominee of Liberty. Ages shown are as of November 25, 2016. The term of each current director expires at the meeting, or until he or she resigns or is otherwise removed and his or her successor is duly elected and qualified. There are no family relationships among any of Liberty's directors.

| Director Nominees | Age | Director Since | Position |
|---|------------|-----------------------|--|
| Thomas W. Bevan (3), (5) | 50 | 2011 | Director |
| Michael A. Carlin (1), (2), (4), (5) | 68 | 2014 | Director |
| Joseph E. Cirigliano (4), (5) | 92 | 2011 | Director |
| Dominic M. D'Amore, Jr. (2), (4), (7) | 63 | 2002 | Director |
| Richard C. Ebner (1), (5), (6) | 66 | 2004 | Director, Chief Operating Officer, Chief Financial Officer & Secretary |
| Donald A. Latore (3), (4), (6), (7) | 74 | 1999 | Director |
| Joseph D. Miceli (1), (3) | 67 | 2005 | Director |
| James Mirgliotta (3), (6), (7) | 83 | 1989 | Director |
| Ralph R. Razinger (2), (4), (5), (6), (7) | 68 | 2007 | Vice Chairman of the Board |
| Thomas A. Reitan (2), (4), (5) | 55 | 2011 | Director |
| Daniel D. Smith (1), (2), (3) | 61 | 2002 | Director |
| William A. Valerian (1), (5), (6), (7) | 73 | 2001 | Chairman of the Board, Chief Executive Officer & President |

- (1) Member of the Asset/Liability Committee
- (2) Member of the Audit Committee
- (3) Member of the Corporate Governance/Nominating Committee
- (4) Member of the Compensation Committee
- (5) Member of the Risk Committee
- (6) Member of the Executive Committee
- (7) Member of the Loan Committee

Information Concerning Nominees for Director

Thomas W. Bevan, J.D. is a founding shareholder and CEO of Bevan & Associates, LPA, Inc. in Boston Heights, Ohio. Bevan & Associates is a law firm that concentrates on asbestos litigation and workers' compensation. Mr. Bevan has been licensed to practice law in the State of Ohio since 1991 and the United States District Court, Northern District of Ohio since 1992. He has practiced law fulltime in Ohio since 1991 and is a member of the Ohio State Bar Association, the Akron Bar Association, the Ohio Association for Justice, the American Association for Justice, and

the Public Justice Foundation.

Michael A. Carlin, CPA (inactive) is a financial management executive with extensive experience in the banking and financial services industries as well as over forty years of advising businesses. Prior to forming Carolan Partners LLC in 2006, Mr. Carlin was a partner with Deloitte & Touche LLP from 1989 to 2006. As an advisor to numerous clients, Mr. Carlin has guided both strategic and financial buyers regarding mergers and acquisitions.

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Mr. Carlin also has extensive experience in bank lending and credit including modeling financial needs, development of deal structure and negotiating terms. He has experience with troubled debt restructurings and resolving liquidity and working capital problems. Mr. Carlin has extensive public markets experience including initial public offerings and SEC and bank regulation compliance. He was also a firm-designated specialist in financial instruments and derivatives.

Joseph E. Cirigliano, J.D. retired after twenty-four years as a Common Pleas and Ninth District Court of Appeals Judge. He is presently a member of the Wickens, Herzer, Panza, Cook & Batista Co. law firm (litigation department). He is a member of the American Bar Association, Ohio State Bar Association, Lorain County Bar Association (Executive Committee, Ethics & Grievance Committee), and American Judicature Society. He is a former member of the Board of Governors of the Ohio State Bar Association. He has served as chairman of Lorain County Community College and is a former Ohio Judicial College trustee.

Dominic M. D Amore, Jr., CPA is one of the founding members of The D Amore Tatman Group, LLC, a certified public accounting and business consulting firm, and has been with that firm since 1999. Mr. D Amore is a member of the American Institute of Certified Public Accountants, the Ohio Society of Certified Public Accountants, and the National Association of Business Valuation Analysts.

Richard C. Ebner, CPA, GCMA has served as the Chief Operating Officer and Chief Financial Officer of the Bank since 2004. Mr. Ebner is a member of the American Institute of Certified Public Accountants and the Ohio Society of Certified Public Accountants.

Donald A Latore was the President of Howard Hanna Mortgage Services, formerly Home Mortgage Assured Corporation, a Howard Hanna Smythe, Cramer Co. subsidiary, from 1999 to his retirement in 2012. Prior to this, he was President and CEO of Assured Mortgage Corporation, a company he started in 1982. Mr. Latore is a member of, and has served on committees for the Mortgage Bankers Associations of America and Ohio, the Mortgage Brokers Associations of America and Ohio, the National Advisory Board for Lenders One, and the Cleveland Area Board of Realtors. Mr. Latore also served as a trustee and past vice president for the Alta House.

Joseph D. Miceli has been the Chief Executive Officer of Miceli Dairy Products Company since 1980. Mr. Miceli is a member of the Board of Trustees of the Northern Ohio Italian Americans (NOIA), and a member of the Board of Directors of Urban Community School.

James Mirgliotta has been a principal officer of Forest City Erectors Inc., a Twinsburg-based steel erection firm, since 1961, and is also a director of that company. He has also served as past Chairman of the Board and a director of Pre-Cast Services Company, a construction company that erects pre-cast concrete and granite products, and President of T.W. Easton Corporation, a heavy machinery rigging and cartage company. In addition, Mr. Mirgliotta has been the past President of the Steel and Iron Contractors Association of Cleveland, past President and a member of the executive board of the National Erectors Association, a past President and a current member of the Board of Directors of the Cleveland Construction Employers Association, and a member and past President of the Twinsburg Rotary Club. Mr. Mirgliotta served as Chairman of Liberty from 1989 through June 2003.

Ralph R. Razinger has been CEO of CABMAT, LLC, a processor and distributor of non-ferrous metals, since 2006 when he founded the firm. He has over twenty-five years of experience in the non-ferrous metals industry. Mr. Razinger is also a partner in RDR Development Group, LLC, which develops commercial and residential properties in both Ohio and Florida, and a partner in R&J Development, which builds custom homes in Northeastern Ohio. He is a former director of the American Copper Council. Mr. Razinger is Vice Chairman of the board.

Thomas A. Reitan is Executive Vice President of HUB Financial Services, a specialized business unit of HUB International. HUB International is the tenth largest global insurance brokerage and risk management consulting

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firm. Prior to HUB, Mr. Reitan was a Principal of The Burnham Insurance group, which was purchased by HUB in 2001. Mr. Reitan has thirty years of experience working exclusively with financial institutions on lending and enterprise risk solutions. His clients and experiences range from super-regional banks to community based lenders throughout the U.S. He has served on a variety of regional and national banking and mortgage banking associations.

Daniel D. Smith is President of Consolidated Investment Corporation, a real estate investment and management company. Since 1993, Mr. Smith has been a member of the Board of Directors of Lake Erie College. He also serves on the Lake-Geauga Committee of the Cleveland Foundation.

William A. Valerian has been Chief Executive Officer of the Bank since 2004. He has served as a director of Liberty since 2001 and the Chairman of the Board since July 2003.

Independent Directors

A majority of the directors and all of the members of the Audit Committee, the Corporate Governance/Nominating Committee, and the Compensation Committee are independent, as such term is defined in Rule 5605(a)(2) of the Nasdaq listing standards. Under Nasdaq Rule 5605(a)(2), independent director means a person other than an executive officer or employee of Liberty or any other individual having a relationship which, in the opinion of Liberty's board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. For purposes of this rule, family member means a person's spouse, parents, children and siblings, whether by blood, marriage or adoption, or anyone residing in such person's home. Under the Nasdaq rule, the following persons shall not be considered independent:

(A) a director who is, or at any time during the past three years was, employed by Liberty;

(B) a director who accepted or who has a family member who accepted any compensation from Liberty in excess of \$120,000 during any period of twelve consecutive months within the three years preceding the determination of independence, other than the following:

(i) compensation for board or board committee service;

(ii) compensation paid to a family member who is an employee (other than an Executive Officer) of Liberty; or

(iii) benefits under a tax-qualified retirement plan, or non-discretionary compensation.

Provided, however, that in addition to the requirements contained in this paragraph (B), Audit Committee members are also subject to additional, more stringent requirements under Nasdaq Rule 5605(c)(2).

(C) a director who is a family member of an individual who is, or at any time during the past three years was, employed by the company as an executive officer;

(D) a director who is, or has a family member who is, a partner in, or a controlling shareholder or an executive officer of, any organization to which Liberty made, or from which Liberty received, payments for property or services in the current or any of the past three fiscal years that exceed 5% of the recipient's consolidated gross revenues for that year, or \$200,000, whichever is more, other than the following:

(i) payments arising solely from investments in Liberty's securities; or

(ii) payments under non-discretionary charitable contribution matching programs.

(E) a director of Liberty who is, or has a family member who is, employed as an executive officer of another entity where at any time during the past three years any of the executive officers of Liberty serve on the compensation committee of such other entity; or

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(F) a director who is, or has a family member who is, a current partner of Liberty's outside auditor, or was a partner or employee of Liberty's outside auditor who worked on Liberty's audit at any time during any of the past three years.

The board has determined that all of the current directors, except for Messrs. Valerian and Ebner, who are executive officers of Liberty, are independent directors within the meaning of the foregoing requirements.

Executive Session

The non-management or independent directors of the board meet periodically in executive session without the directors who are executive officers.

Audit Committee

The Audit Committee of Liberty is required to have at least three members, each of whom must comply with the independence and other standards for audit committee members under Nasdaq Rule 5605(c)(2) and Rule 10A-3(b)(1) under the Securities Exchange Act of 1934, as amended (the Act). The current members of the Audit Committee of the Bank are Michael A. Carlin, Dominic M. D'Amore, Jr. (Chair), Ralph R. Razinger, Thomas A. Reitan and Daniel D. Smith.

Each Audit Committee member must: (i) be independent as defined under the Nasdaq director independence rules set forth above; (ii) meet the criteria for independence set forth in Rule 10A-3(b)(1) under the Act (subject to the exemptions provided in Rule 10A-3(c) under the Act); (iii) not have participated in the preparation of the financial statements of Liberty or any current subsidiary of Liberty at any time during the past three years; and (iv) be able to read and understand fundamental financial statements, including Liberty's balance sheet, income statement, and cash flow statement. Furthermore, at least one member of the Audit Committee has, and will continue to have, past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities. Liberty has determined that Audit Committee members Michael A. Carlin and Dominic M. D'Amore, Jr. meet these requirements.

Compensation of Directors; Certain Transactions

Members of the board who are not employees of Liberty were compensated for their attendance at meetings of the board during 2015 at the rate of \$800 per meeting attended. They received no other compensation for their service on the board. In addition, members of the board who are not employees of Liberty and who served on committees of the board received \$275 per meeting attended. Effective January 1, 2016, the compensation for attendance at meetings of the board for members who are not employees of Liberty was increased from \$800 to \$900 per meeting while compensation for attendance at meetings of committees of the board was increased from \$275 to \$300 per meeting.

Mr. Valerian was compensated \$12,000 in 2015 for his services on the board and the committees on which he serves. Mr. Valerian will be compensated \$12,000 in 2016 for his services on the board and the committees on which he serves.

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The following table sets forth the compensation paid to the directors who are not employees of Liberty during 2015:

| Name | Board Fees | Committee Fees | Total |
|-------------------------|-------------------|-----------------------|--------------|
| | \$ | \$ | \$ |
| Thomas W. Bevan | 8,800 | | 8,800 |
| Michael A. Carlin | 9,600 | 2,750 | 12,350 |
| Joseph E. Cirigliano | 9,600 | 825 | 10,425 |
| Dominic M. D Amore, Jr. | 9,600 | 2,200 | 11,800 |
| Donald A. Latore | 9,600 | 1,100 | 10,700 |
| Joseph D. Miceli | 8,000 | 1,100 | 9,100 |
| James Mirgliotta | 8,800 | 550 | 9,350 |
| Ralph R. Razinger | 7,200 | 2,200 | 9,400 |
| Thomas A. Reitan | 8,800 | 1,650 | 10,450 |
| Daniel D. Smith | 9,600 | 2,200 | 11,800 |

The board met twelve (12) times during 2015. Each director attended at least 75% of the meetings of the board.

From time to time, Liberty extends credit to its directors and executive officers for business and personal uses. All extensions of credit to directors and executive officers are made in the ordinary course of Liberty's business and on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other borrowers involving similar credit risk. Such credit extensions are made after a determination by the Bank that they do not involve more than the normal risk of collectability or present other unfavorable features.

*Liberty's board of directors recommends voting **FOR** election of the identified director nominees.*

Liberty Merger Proposal

As discussed throughout this joint proxy statement/prospectus, Liberty is asking stockholders to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement. Liberty stockholders should carefully read this document in its entirety for more detailed information regarding the Reorganization Agreement and the Merger. In particular, stockholders are directed to the copy of the Reorganization Agreement attached as Annex A to this joint proxy statement/prospectus.

*Liberty's board of directors recommends voting **FOR** approval and adoption of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement.*

Liberty Adjournment Proposal

If there are insufficient votes at the time of the Liberty annual meeting to approve and adopt the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, the meeting may be adjourned to another time or place to allow additional time for proxy solicitations. If the number of shares of Liberty common stock voting in favor is insufficient to approve and adopt the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, Liberty intends to move for adjournment to enable the Liberty board of directors to solicit additional proxies for approval. If that occurs, Liberty will ask the Liberty stockholders to vote upon the adjournment proposal (but not the Merger proposal) and will also ask stockholders to vote on the director election proposal and auditor ratification proposal. Liberty is asking stockholders to authorize the proxy holder to vote in favor of adjournment of the Liberty annual meeting to another time and place for the purpose

of soliciting additional proxies. If the adjournment proposal is approved, proxies will remain valid if not revoked and Liberty could use the additional time to solicit additional proxies, including the solicitation of proxies from Liberty stockholders who have previously voted.

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*Liberty's board of directors recommends voting **FOR** the adjournment proposal.*

Auditor Ratification Proposal

The Audit Committee of Liberty's board appointed Maloney + Novotny LLC, Certified Public Accountants, to serve as the Bank's independent auditors for its fiscal year ending December 31, 2016. The board is seeking stockholder ratification of the Audit Committee's appointment of Maloney + Novotny LLC. Representatives of Maloney + Novotny LLC are expected to attend the annual meeting to respond to appropriate questions, and will have an opportunity to make a statement if they desire. If the appointment of Maloney + Novotny LLC is not ratified by the stockholders, the Audit Committee may appoint another independent accounting firm or may decide to maintain the appointment of Maloney + Novotny LLC. Notwithstanding the selection and ratification, the Audit Committee, in its discretion, may direct the appointment of a new independent public accounting firm at any time during the year if the Audit Committee believes that such a change would be in the best interest of Liberty and its stockholders.

The affirmative vote of a majority of the voting power of the common stock present is necessary for ratification of the selection of independent auditors.

*Liberty's board of directors recommends voting **FOR** ratification of the selection of Maloney + Novotny LLC as independent auditors.*

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THE SPECIAL MEETING OF MIDDLEFIELD STOCKHOLDERS

Time, Date and Place

This joint proxy statement/prospectus is provided to Middlefield stockholders by Middlefield's board of directors for solicitation of proxies to be used at the special meeting of stockholders. The special meeting will be held at 10:00 a.m. local time on January 10, 2017 at The Middlefield Banking Company, 15985 East High Street, Middlefield, Ohio 44062, including any adjournment.

Matters to be Considered

Middlefield stockholders will be asked at the special meeting to consider and vote upon proposals to

adopt and approve the Reorganization Agreement,

approve the issuance of up to 563,261 shares of Middlefield common stock in the Merger,

adjourn the meeting to allow solicitation of additional proxies if there are insufficient votes to adopt and approve the Reorganization Agreement,

transact any other business properly presented at the special meeting or at any adjournment. Middlefield's board of directors is not aware of any other business to be transacted at the meeting.

Middlefield's board of directors believes the Merger is in the best interests of Middlefield stockholders and recommends that you vote (1) **FOR** the Reorganization Agreement, (2) **FOR** issuance of common stock, and (3) if the adjournment proposal is presented for a vote, **FOR** adjournment.

Record Date; Shares Outstanding and Entitled to Vote

The board of directors fixed the close of business on November 17, 2016 as the record date for determining Middlefield stockholders entitled to vote at the special meeting. As of the close of business on the record date there were 2,250,893 shares of Middlefield common stock outstanding and entitled to vote at the special meeting. Middlefield common stock is held of record by approximately 1,060 stockholders. Each share of Middlefield common stock entitles the holder to one vote on all proposals at the special meeting.

Votes Required; Quorum

Under the Ohio General Corporation Law and Middlefield's Second Amended and Restated Articles of Incorporation, adoption and approval of the Reorganization Agreement requires the affirmative vote of the holders of at least two-thirds of Middlefield's outstanding common stock. Under Nasdaq rules, approval of the issuance of Middlefield common stock requires the affirmative vote of the holders of a majority of votes cast on the proposal. Under Middlefield's regulations, approval of adjournment requires the affirmative vote of the holders of a majority of the votes cast on the proposal. On the record date Middlefield directors owned a total of 102,153 shares of Middlefield common stock, or approximately 4.6%.

If you are a Middlefield stockholder and you do not return a proxy card or vote in person at the Middlefield special meeting or if you mark the proxy card or ballot **ABSTAIN** for the proposal to adopt and approve the Reorganization Agreement, this will have the same effect as a vote **AGAINST** that proposal. Failing to vote or abstaining will have no effect on the adjournment proposal or the proposal to approve issuance of shares.

If you hold your Middlefield stock in street name through a broker, bank, or other nominee, please provide your broker, bank, or nominee (the record holder of your common stock) with voting instructions. Under Nasdaq rules, brokers who hold shares in street name for a beneficial owner are allowed to vote in their

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discretion on routine proposals, even without voting instructions from beneficial owners. For proposals Nasdaq considers non-routine, however, brokers are not allowed to exercise voting discretion and cannot vote on those non-routine proposals unless the beneficial owner gives specific voting instructions. Broker non-votes occur when a broker or nominee does not receive voting instructions from the beneficial owner. Middlefield believes the proposals to be voted on at the special meeting are non-routine and that brokers therefore will not be able to vote on those proposals without specific voting instructions. Therefore, if you hold Middlefield stock in street name but do not give voting instructions to your broker, bank, or other nominee, the broker, bank, or other nominee may not vote your shares on the proposal to adopt and approve the Reorganization Agreement, the proposal to approve share issuance, or the proposal to adjourn the meeting.

Broker non-votes on the proposal to adopt and approve the Reorganization Agreement will have the same effect as votes **AGAINST** that proposal. Failing to give voting instructions also will prevent your broker, bank, or other nominee from voting on the proposal to issue common stock and the adjournment proposal, but under Middlefield's regulations broker non-votes on those proposals have no effect because the proposals are decided by a majority of votes actually cast. Your broker, bank, or other nominee will provide you with a proxy card and directions for giving voting instructions. Please follow the broker, bank, or other nominee's directions to give voting instructions.

A quorum will exist at Middlefield's special meeting if a majority of the outstanding common stock is represented in person or by proxy. A quorum must be present in person or by proxy at the meeting before any action other than adjournment can be taken. A properly executed proxy card marked **ABSTAIN** will be counted for purposes of determining whether a quorum is present.

Solicitation and Revocation of Proxies

A proxy card accompanies this joint proxy statement/prospectus. If you are a Middlefield stockholder your proxy is solicited by Middlefield's board of directors. Regardless of whether you attend the special meeting, the Middlefield board urges you to return your properly executed proxy card as soon as possible. If you return a properly executed proxy card before the special meeting and do not revoke it, the Middlefield common stock represented by the proxy card will be voted at the special meeting or adjournment. The common stock will be voted as specified on the proxy card.

If you are a Middlefield stockholder and you sign, date, and return a proxy card but do not specify how your shares are to be voted, your shares will be voted **FOR** adoption and approval of the Reorganization Agreement and the transactions contemplated thereby, **FOR** issuance of common stock in the Merger, and if adjournment of the meeting is necessary to allow time for solicitation of additional proxies your shares will be voted **FOR** adjournment. Although Middlefield's board currently does not expect any other proposals to be presented at Middlefield's special meeting, if any other proposals are properly presented the common stock represented by properly executed proxy cards will, to the extent permitted by applicable law, be voted in the discretion of the persons named in the proxy card in accordance with their best judgment.

If you return a properly executed proxy card, you may revoke it at any time before a vote is taken at the meeting by:

filing a written notice of revocation with Ms. Kathleen M. Johnson, Secretary, Middlefield Banc Corp.,
15985 East High Street, P.O. Box 35, Middlefield, Ohio 44062,

executing and returning another proxy card with a later date, or

attending the meeting and giving notice of revocation in person.

Attending Middlefield's special meeting will not, by itself, revoke your proxy. If you instructed your broker, bank, or other nominee to vote your shares but you wish to change or revoke those voting instructions, you must follow your broker, bank, or other nominee's directions for changing or revoking your vote.

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Middlefield will bear its own cost of solicitation of proxies. Proxies will be solicited by mail and may also be solicited by personal contact, telephone, facsimile, or electronic mail by directors, officers, and employees, none of whom will receive additional compensation for their solicitation activities. Middlefield has also engaged D.F. King & Co., a proxy soliciting firm, to assist in the solicitation of proxies for a fee of \$15,000 and reimbursement of reasonable out-of-pocket expenses. Middlefield will pay the standard charges and expenses of brokerage houses, voting trustees, banks, associations, and other custodians, nominees, and fiduciaries who are record holders of Middlefield common stock not beneficially owned by them for forwarding this joint proxy statement/prospectus and other proxy solicitation materials to and obtaining proxies from the beneficial owners of Middlefield common stock.

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PROPOSALS SUBMITTED TO MIDDLEFIELD STOCKHOLDERS

Middlefield Merger Proposal

As discussed throughout this joint proxy statement/prospectus, Middlefield is asking its stockholders to adopt and approve the Reorganization Agreement and approve the transactions contemplated thereby. Middlefield stockholders should read this document carefully in its entirety for more detailed information regarding the Reorganization Agreement and the Merger. In particular, stockholders are directed to the copy of the Reorganization Agreement attached as Annex A to this joint proxy statement/prospectus.

*Middlefield's board of directors recommends voting **FOR** approval and adoption of the Reorganization Agreement and approval of the transactions contemplated thereby.*

Middlefield Proposal to Approve Issuance of Common Stock

Middlefield is also asking stockholders to consider and vote on the proposal to issue up to 563,261 shares of Middlefield common stock in the Merger. A company with Nasdaq-listed stock is required by Nasdaq rules to obtain stockholder approval if a proposed stock issuance equals or exceeds 20% of the number of shares outstanding before the issuance. The number of shares to be issued by Middlefield in the Merger is approximately 25% of the number of shares outstanding, and for this reason Nasdaq rules require Middlefield to seek stockholder approval. **If Middlefield stockholders do not approve the common stock issuance, Middlefield will not be able to complete the Merger.**

*Middlefield's board of directors recommends voting **FOR** approval of the issuance of up to 563,261 shares of Middlefield common stock in the Merger.*

Middlefield Adjournment Proposal

If there are insufficient votes at the time of Middlefield's special meeting to approve and adopt the Reorganization Agreement, the meeting may be adjourned to another time or place to allow additional time for proxy solicitations. If the number of shares of Middlefield common stock voting in favor is insufficient to approve and adopt the Reorganization Agreement, Middlefield intends to move for adjournment to enable Middlefield's board to solicit additional proxies for approval. If that occurs, Middlefield will ask stockholders to vote upon adjournment but not the merger proposal or the proposal to approve share issuance. Middlefield is asking stockholders to authorize the proxy holder to vote in favor of adjournment of the Middlefield special meeting to another time and place for the purpose of allowing additional proxy solicitation. If the adjournment proposal is approved, proxies will remain valid if not revoked and Middlefield could use the additional time to solicit additional proxies, including solicitation of proxies from Middlefield stockholders who have previously voted.

*Middlefield's board of directors recommends voting **FOR** the adjournment proposal.*

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DISSENTERS RIGHTS

Liberty stockholders are entitled to exercise dissenters' rights of appraisal under the National Bank Act, 12 U.S.C. §215. A copy of the dissenters' rights provisions of 12 U.S.C. 215 is attached as Annex B to this joint proxy statement/prospectus. Under these provisions of federal law, Liberty stockholders may dissent from the Merger and elect to have the fair market value of their shares appraised, receiving payment of the appraised value in cash. To assert dissenters' right of appraisal, a stockholder must vote against the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement or give notice in writing at or before Liberty's meeting that the stockholder dissents, giving such notice to the presiding officer. The dissenting stockholder must make a written request to Middlefield for payment of the appraised value of his or her shares at any time before 30 days after Merger consummation, accompanied by surrender of his or her stock certificates.

The value of a dissenter's Liberty shares will be determined by a committee of three persons, including one selected by a majority vote of the dissenting stockholders, one selected by the directors of The Middlefield Banking Company, and the third by the two so chosen. The valuation agreed upon by any two of these three appraisers governs, but if the value fixed by the appraisers is not satisfactory to a dissenting stockholder, the stockholder may within five days after being notified of the appraised value of his or her shares appeal to the OCC, which will cause a reappraisal to be made. The OCC's reappraisal will be final and binding. If within 90 days after the effective date of the Merger one or more of the appraisers is not selected or the appraisers fail to determine the value of the dissenting shares, upon written request of any interested party the OCC will cause an appraisal to be made, which will be final and binding on all parties. The expenses of the OCC in making the appraisal or reappraisal will be paid by The Middlefield Banking Company.

This summary of dissenters' rights is qualified in its entirety by reference to the statutory provisions of 12 U.S.C. 215, paragraphs (b) through (d), reproduced in Annex B. Failure by a Liberty stockholder to follow the required steps for perfecting rights as a dissenting stockholder will result in a loss of those rights. Stockholders' notices of intent to demand appraisal of and payment for their shares should be sent to: William A. Valerian, Chairman, President and Chief Executive Officer, Liberty Bank, N.A., 25201 Chagrin Boulevard, Suite 120, Beachwood, Ohio 44122. When the Merger is completed, before the 30th day after completion of the Merger stockholders who have properly asserted dissenters' rights should request in writing to Middlefield that it pay the appraised value of their shares, surrendering their stock certificates to Middlefield at that time. The written request after the Merger should be sent to: Thomas G. Caldwell, President and Chief Executive Officer, The Middlefield Banking Company, 15985 East High Street, P.O. Box 35, Middlefield, Ohio 44062.

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THE MERGER

The Proposed Merger

The Reorganization Agreement provides for the merger of Liberty into The Middlefield Banking Company with The Middlefield Banking Company being the surviving entity. As part of the transaction, MBC Interim Bank will first merge into Liberty, followed immediately by Liberty's merger into The Middlefield Banking Company.

The Reorganization Agreement is attached to this joint proxy statement/prospectus as Annex A and is an integral part of this joint proxy statement/prospectus. *You are encouraged to read the Reorganization Agreement carefully. The Reorganization Agreement is the principal legal document governing the Merger.*

Background of the Merger

Retained by Liberty as financial advisor for a possible strategic transaction, in March 2016 Boenning & Scattergood, Inc. (Boenning) invited financial organizations including Middlefield to review a confidential information memorandum concerning Liberty and to submit an initial acquisition bid, with an April 18, 2016 deadline for non-binding indications of interest. Executing the March 21, 2016 confidentiality agreement, Middlefield received a copy of Boenning's confidential information memorandum. After reviewing the confidential information memorandum, Middlefield management declined to submit a bid. Beginning with the financial crisis of 2007 and 2008 merger and acquisition activity for financial institutions remained for many years at greatly reduced levels by comparison to the ten-year period ended in 2006, with much of the post-crisis activity involving acquisitions of problem institutions or sales of control to private equity firms. But by the end of 2015 the pace of healthy financial institution acquisitions was again accelerating. This was one of the factors that led Middlefield management to initially decline submitting a bid for Liberty, believing a very competitive bidding process would lead to deal terms outside the range sanctioned by Middlefield's internal policies.

In the first half of 2016 Middlefield management's attention was focused on raising additional equity in a private offering. Middlefield engaged Boenning to assist with the private equity offering, entering into a letter agreement with Boenning on February 12, 2016, later superseded by an April 27, 2016 Placement Agency Agreement. Under the letter agreement and Placement Agency Agreement, Boenning acted as Middlefield's exclusive placement agent. A private placement to accredited investors only of no more than 20% of Middlefield's common stock outstanding, the private offering began on or about May 2, 2016 and ended June 30, 2016. Middlefield sold to 29 accredited investors a total of 360,815 shares at \$33 per share, or approximately 19% of the shares outstanding before the private placement and 16% of the shares outstanding after. Middlefield's net proceeds of the private offering were \$11.3 million, after commissions of approximately \$577,000 payable to Boenning and reimbursement of \$20,245 of Boenning expenses. With the proceeds of the private placement Middlefield repaid borrowings, including a \$3.0 million line of credit from Liberty. If within 24 months after the end of the private offering Middlefield raises additional equity from an investor contacted by Boenning, Boenning will be entitled by the Placement Agency Agreement to a commission at the same rate applicable to the 2016 private sales. Boenning is entitled to indemnification from Middlefield for liabilities arising out of the private offering, as well as contribution by Middlefield to the damages, costs, and expenses that may be incurred by Boenning. Boenning has the right of first refusal to act as Middlefield's placement agent if Middlefield engages in a rights offering to stockholders at any time before July 1, 2017, with a 5.0% commission rate on sales to persons who became Middlefield stockholders through the private offering and a reduced commission rate for sales to directors, executives, and other stockholders.

Middlefield also has an investment banking relationship of long standing with Donnelly Penman & Partners Inc. In early April 2016, after Middlefield management initially declined Boenning's invitation to bid on the Liberty

transaction, Donnelly Penman informed Middlefield management that a number of other potential bidders also had declined to submit bids because of other acquisition transactions or for other reasons not having

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to do with Liberty. With a reduced number of potential bidders, Donnelly Penman suggested that management reconsider the decision not to submit a bid, outlining in very general terms a deal proposal management could consider making. Management discussed this with the Executive Committee of the board of directors of Middlefield at a meeting on Tuesday, April 12, 2016, a meeting at which the principal item of business was the private placement transaction that management desired to complete. The directors on the Executive Committee were Directors Turk, Skidmore, Caldwell, and Heslop. Director Darryl Mast also joined the meeting.

The Executive Committee and Director Mast convened again two days later, on April 14, 2016, to discuss the Liberty proposal, with representatives of Donnelly Penman present as well. At this meeting a deal proposal was outlined by Donnelly Penman and discussed at length, with consideration given to transaction-related costs such as the cost of Liberty's data processing contract and the costs associated with Liberty's executive severance arrangements, the future of Liberty's student loan portfolio, the uncertain status of Liberty's recently added loan production office in Wooster, Wayne County, Ohio, potential loss of Liberty's significant deposit customers, the source of funds for the cash component of the potential transaction and the potential dilution resulting from the equity component, the effect of the acquisition on Middlefield's regulatory capital, and potential cost savings that could result for the combined organization if redundancies are eliminated after acquisition. Aware of the Monday, April 18, 2016, deadline for submitting bid proposals, the committee authorized management to request from Donnelly Penman a post-acquisition financial projection revised to assume loss of Liberty's two deposit customers, who according to the confidential information memorandum together accounted for deposits of more than \$50 million, and sale of Liberty's student loan portfolio at a slight loss.

On Friday, April 15, 2016 the Executive Committee—Directors Turk, Skidmore, Caldwell, and Heslop—reviewed Donnelly Penman's revised projections of financial results. The committee concluded that the overall effect of the revised assumptions was not materially adverse, noting that the period to earn back the dilution of Middlefield's tangible book value and the period in which the transaction becomes accretive to Middlefield's earnings are within Middlefield's internal guidelines, although the tangible book value dilution is slightly outside of the guidelines recommended range. Authorizing management to submit a nonbinding bid at the price of 125% of Liberty's tangible book value, the committee instructed management that the bid must be subject to the condition that Liberty sell its student loan portfolio and declare a special cash dividend before acquisition closing to reduce excess capital.

With a 24-hour extension for submitting the indication of interest, the same Executive Committee members met again on Monday, April 18, 2016, to finalize Middlefield's bid, with Donnelly Penman participating by telephone conference. Subject to obtaining legal review, the Executive Committee authorized management to submit to Boenning a bid in the form of a nonbinding letter of intent, with a total transaction value in the range of approximately 125% to 130% of tangible book value, or 137.5% to 145.0% of tangible book value adjusted for the proposed special cash dividend. Recognizing that Liberty stockholders would possess approximately 17% of Middlefield's outstanding stock after the acquisition, Middlefield agreed to offer two board seats to Liberty, one at the level of the holding company and another at the level of The Middlefield Banking Company. Middlefield submitted its bid by the Tuesday, April 19, 2016 deadline.

On April 19, 2016 Boenning informed Middlefield that it was one of four bidders (three banks and one individual investor) being invited to perform due diligence and thereafter to submit a final bid. Middlefield submitted its due diligence request list to Boenning on April 22, 2016

CEO Thomas G. Caldwell updated the board at its May 9, 2016 regular meeting about the status of Middlefield's indication of interest. CEO Thomas G. Caldwell, COO James R. Heslop, II, and CFO Donald L. Stacy met on Thursday, May 12, 2016, with Liberty's board of directors, the day immediately after Middlefield's 2016 annual meeting, outlining for the benefit of Liberty's board the terms of Middlefield's acquisition proposal. Middlefield

representatives performed on-site due diligence of Liberty on May 9, 10, and 11, and during this period and thereafter Middlefield and its advisors made use of Boenning s electronic data room, where books and records of Liberty were available confidentially. On May 20, 2016 CEO Thomas G. Caldwell

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had a breakfast meeting at which he was introduced by Liberty's CEO William A. Valerian to Director Thomas W. Bevan. Mr. Bevan is not only a director of Liberty but also controls an organization that is one of Liberty's two largest depositors.

Middlefield's Executive Committee met again on May 25, 2016, with Directors Turk, Skidmore, Caldwell, and Heslop and with Director Mast added to the Executive Committee's membership. Representatives of Donnelly Penman attended the May 25, 2016 meeting by teleconference. The committee noted with approval that the Liberty acquisition would give Middlefield the opportunity to achieve its goal of entering the Cuyahoga County and Summit County markets, add SBA lending expertise to Middlefield's lending products and services, generate income through sale of the government-guaranteed portion of SBA loans into the secondary market, and with Liberty's student loan product constitute another potential addition to Middlefield's loan products and services. Donnelly Penman discussed its updated merger analysis, slightly decreasing its estimate of the post-acquisition value of Liberty's loan portfolio, reducing the estimated loss of deposits after the acquisition, which is referred to as deposit runoff, and slightly reducing the estimated severance benefits payable to Liberty executives as a result of the acquisition. Donnelly Penman's updated analysis also took into account Middlefield's ongoing private placement, which would strengthen Middlefield's capital position, and presented updated projections of Middlefield's financial condition on a stand-alone basis (stand-alone meaning without taking the Merger into account).

For the final bid Donnelly Penman outlined a proposed price of 145% of Liberty's adjusted tangible book value, for a total transaction value of approximately \$39.6 million, including a \$12.5 million special dividend payable by Liberty before closing, with 50% of the merger consideration consisting of cash and the other half Middlefield stock. The requirement that Liberty sell the student loan portfolio was no longer part of Middlefield's proposal, because the portion of Liberty's student loan portfolio maintained on Liberty's books performs satisfactorily and the portion originated for sale has significant associated correspondent deposit balances maintained at Liberty by the parties to whom Liberty sells the loans. The May 25 meeting ended with the committee agreeing to recommend that the full board approve the proposed transaction terms at the board's June 6 special meeting, one day before the June 7 final bid deadline. Donnelly Penman met again with the Executive Committee on June 1, 2016, updating the committee about the status of the letter of intent.

CEO Thomas G. Caldwell updated the board at its June 6 special meeting about the bid process. Donnelly Penman and Middlefield's counsel joined the meeting by teleconference. By this time two of the four bidders invited to submit a final bid dropped out, leaving Middlefield and one unknown bidder remaining. Based on conversations with Thomas W. Bevan, a director of Liberty and one of its two largest depositors, the projected deposit runoff calculated by Donnelly Penman was reduced again. Mr. Caldwell noted favorably to the board that Liberty and Middlefield have a community banking focus in common, that Liberty does not have material asset quality concerns, that the due diligence process revealed nothing negative about Liberty, that Liberty's offices are located in Middlefield's targeted area of expansion, and that Liberty's SBA lending would expand Middlefield's products and potentially generate income from sale of the government-guaranteed portion of the SBA loans. For the proposed final bid, the period to earn back the estimated 16.5% dilution of Middlefield's tangible book value and the period in which the transaction becomes accretive to Middlefield's earnings remained within Middlefield's internal guidelines, but the tangible book value dilution remained slightly outside of the guidelines' recommended range. The board's special meeting ended with unanimous approval for management to submit a final bid on the terms outlined at the meeting, at 145% of Liberty's adjusted tangible book value, or approximately \$40.54 per share (including the amount of the special dividend).

Middlefield submitted its final bid in the form of a nonbinding letter of intent on June 6, 2016. Liberty informed Middlefield that the final bids would be reviewed at Liberty's board meeting on Friday, June 10. After the June 10 board meeting, at Liberty's request Boenning informed Donnelly Penman that Liberty's counterproposal was to obtain two holding company board seats at Middlefield, a \$1.00 per share increase in the bid price, and a continued interest

in future recoveries on previously charged off student loans.

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At a special meeting of Middlefield's board on Monday, June 13, with Donnelly Penman and Middlefield's counsel joining by teleconference, the board approved a final offer, agreeing to add CEO William A. Valerian and Director Thomas W. Bevan to Middlefield's board and agreeing to a price increase of approximately \$0.55 per share, half in additional cash and half in additional Middlefield stock, but declined to offer Liberty a continued interest in future recoveries of previously charged off loans. The letter of intent also provided for continued indemnification and insurance coverage of Liberty's officers and directors for six years after the transaction. Middlefield's board also made clear that the company's willingness to enter into a definitive acquisition agreement was conditioned on Liberty directors executing voting agreements, committing themselves to vote their Liberty shares in favor of the transaction with Middlefield.

Promptly after the June 13 special meeting Donnelly Penman informed Boenning of Middlefield's final offer. Middlefield's letter of intent was signed and returned by Liberty on June 14, 2016, and the parties then proceeded to negotiation of the definitive Reorganization Agreement. The letter of intent provided for the merger of Liberty into The Middlefield Banking Company in a transaction qualifying as a tax-free reorganization, at the price of 147% of Liberty's adjusted tangible May 31, 2016 book value. Excluding approximately \$1.147 million payable for cancellation of Liberty's outstanding options and phantom stock, total transaction consideration under the final letter of intent was approximately \$39.416 million, consisting of (1) \$12.5 million in the form of a special cash dividend before acquisition closing, (2) \$13.458 million in cash merger consideration, and (3) \$13.458 million in stock merger consideration at a 0.882 fixed exchange ratio of Middlefield stock for 50% of Liberty stock, based on the \$31.81 closing price for Middlefield stock on June 13, 2016.

Subsequently, Liberty's outside tax counsel reviewed Middlefield's revised indication of interest and, after consultation with and concurrence from Middlefield's outside tax counsel, determined that the proposed payment by Liberty of a \$12.5 million dividend to its stockholders immediately prior to completion of the Merger would adversely affect the tax-free reorganization treatment of the Merger and the ability of Liberty's tax counsel to issue a favorable tax opinion. Following further discussions among the parties and their counsel, it was determined that the transaction should be restructured to reduce the Liberty special dividend from \$12.5 million to approximately \$3.0 million, increase the cash portion of the Merger consideration from 50% to 55% and decrease the common shares portion of the Merger consideration to 45%, while maintaining the same total transaction value. Over the next several weeks, the parties revised the draft Reorganization Agreement to reflect the latest structure of the transaction and negotiated its terms and conditions.

At a July 11, 2016 special meeting, with counsel present and Donnelly Penman present by teleconference, the board reviewed the status of the proposed transaction and the progress toward execution of the definitive acquisition agreement. Donnelly Penman presented a revised analysis of the transaction consideration, reducing from \$12.5 million to \$3.0 million the amount of the special cash dividend payable to Liberty stockholders before closing and increasing the portion of the cash merger consideration from 50% to 55%, with the stock portion therefore decreasing to 45%, while maintaining the total transaction value. According to Donnelly Penman's analysis of the revised final terms, Liberty stockholders would have a slightly larger 18.7% stake in the combined Middlefield organization after acquisition, rather than the initial estimate of approximately 17%, Middlefield would earn back the tangible book value dilution within the time range sanctioned by Middlefield's internal policy, and Middlefield's regulatory capital ratios would be within policy limits as well. The slight increase in the number of shares to be issued to Liberty stockholders has the consequence of requiring a vote of Middlefield stockholders as well. The number of shares of Middlefield common stock issuable to Liberty stockholders slightly exceeds 20% of the number outstanding before the acquisition, requiring Middlefield approval under Nasdaq rules, and one-sixth of the number outstanding after the acquisition, requiring stockholder approval under OGCL section 1701.83(A).

On July 25, 2016, Liberty's on-site due diligence investigation of Middlefield occurred, conducted by management of Liberty as well as a representative of Boenning. Liberty had been reviewing Middlefield's SEC filings and additional information provided to Boenning, as well as information provided by Middlefield in connection with the May 12 presentation to the Liberty Board.

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Middlefield's board considered the proposed final Reorganization Agreement at a special meeting on July 27, 2016, with Donnelly Penman participating and Middlefield's counsel present by teleconference. The Reorganization Agreement was signed on July 28, 2016. The board considered the slight change in the transaction structure, with the introduction of a first-step merger of MBC Interim Bank into Liberty occurring immediately before the merger of Liberty into The Middlefield Banking Company. The change in transaction structure is for the sole purpose of minimizing adverse potential tax consequences to The Middlefield Banking Company if the transaction does not qualify for tax-free reorganization treatment. Donnelly Penman presented its fairness opinion to the board and outlined the significant terms and financial impact of the transaction, including a special dividend of \$3.13 per share for each of Liberty's 959,283 outstanding shares, cash merger consideration of \$20.88 per share and stock consideration valued at \$17.08, for total consideration of approximately \$39.1 million (including the special dividend), or \$41.09 per share. Donnelly Penman informed the board that tangible book value dilution would be approximately 16.3%, projected to be earned back in a period of less than 3.5 years, with accretion to earnings exceeding 38% in the first year, an internal rate of return exceeding 20%, and a pro forma Tier 1 leverage ratio at The Middlefield Banking Company of 7.71% and a ratio of tangible common equity to tangible assets of 8.32%. Donnelly Penman informed the board that total consideration is approximately 1.31 times Liberty's tangible book value and 19.12 times last-twelve-months earnings, with a core deposit premium of 5.16%. The July 27, 2016 special meeting concluded with Middlefield's board approving the Reorganization Agreement unanimously.

Liberty's Reasons for the Merger

The Liberty Board of Directors has regularly reviewed and discussed Liberty's business strategy, performance and prospects in the context of developments in the banking industry, the regulatory environment and the competitive landscape. Among other things, the board of directors from time to time has discussed various strategic alternatives, including both acquiring other institutions and being acquired by another institution. Based on Liberty's continued growth, the board of directors believed that it would need to engage in a strategic transaction at some point in time.

For a considerable time, the board of directors of Liberty has been concerned about the increasing expense and complexity of regulatory compliance for financial institutions, as well as the competition among large and small financial institutions for the same loan and deposit products. The directors have discussed in recent years how to best ensure the continued sound operation and profitability of Liberty in the face of these concerns.

Over the years, the board considered from time to time how to best provide for the continued safe and sound operation and strong performance of Liberty in the challenging regulatory and competitive environment. The board also discussed the lack of liquidity of Liberty's stock as well as management succession issues. These discussions included a number of formal and informal meetings at which the directors discussed, among other possibilities, whether to proceed with exploring the possibility of acquiring or merging with another bank. Board members received the unsolicited views of some Liberty stockholders regarding a need for greater liquidity in the Liberty shares. As a result of these stockholder discussions and the board's concerns regarding the increasingly challenging competitive and regulatory environment, the board decided to consider the possibility of exploring a merger and to learn more about the current merger and acquisition market.

From time to time over the years, the board invited Boenning to make a presentation about regional and national merger and acquisition activity. During 2015, Boenning reviewed such trends as well as the procedure and timeline for soliciting nonbinding indications of interest from potential merger partners. Boenning also presented a list of bank and thrift holding companies that, according to Boenning's analysis, might have a logical interest in a possible merger with Liberty. In evaluating whether to proceed with the possibility of soliciting potential merger partners, the board also considered the stated desires of some Liberty stockholders for greater liquidity in Liberty shares and the board's long-held concerns regarding competition and regulation. After careful consideration of all the foregoing, the directors

decided to consider Boenning's presentation and reconvene at a later time to determine whether to pursue the process of soliciting interest in a possible merger.

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At a meeting of the board held on December 14, 2015, the Liberty directors resumed their discussions regarding whether to enter into the process of soliciting interest in a possible merger. After lengthy consideration of all the foregoing factors, and in light of the board's numerous prior discussions regarding exploring the possibility of a merger, the board unanimously decided to proceed with the process, subject to the agreement and understanding that they could terminate the process at any time before the execution of a definitive agreement in the event that their expectations for stockholder value were not realized.

In January 2016, Boenning was hired by Liberty as its financial advisor to counsel Liberty with respect to a possible strategic transaction. Boenning assisted Liberty in preparing a confidential information memorandum and a limited data room containing certain financial and operational information of Liberty. Liberty and Boenning identified thirty-three (33) potential partners to contact and inquire as to whether such party would be interested in reviewing the memorandum and data room. Of those parties, twenty-two (22) executed confidentiality agreements and accessed the data room and four (4) submitted written indications of interest, three of which were from other banks and one of which was from an individual investor. On April 19, 2016, the board of directors met to consider the four (4) indications of interest. The board of directors reviewed with Boenning the current state of the national and local banking markets, as well as the current environment for bank transactions. The board of directors also reviewed in detail each potential partner's business, operations and financial performance. The board of directors discussed each of the indications of interest in detail and considered the merits of an all cash offer versus a part-stock, part-cash offer. The board of directors also reviewed and considered the financial and operating performance of each party and considered the effect of each offer on the submitting party's financial condition. The board, with the advice of Boenning, determined that providing these four (4) bidders the opportunity to continue the due diligence process would maintain a competitive bidding process, while minimizing the potential disruption to Liberty's operations. Each of the parties subsequently conducted a thorough due diligence process, including on-site meetings with Liberty management and extensive review of materials in the online data room.

At a special meeting of the board of directors on June 10, 2016, Boenning informed the board that two (2) of the potential acquirers had decided not to continue in the process, leaving two finalists. At that same meeting, the board reviewed the remaining two (2) indications of interest in detail and provided Boenning with a list of requested changes to each indication of interest. Boenning contacted each party to review and discuss the board's requested changes and provided each party a last opportunity to increase its bid.

At a telephonic special meeting of the board of directors on June 14, 2016, Liberty's board of directors reviewed the two (2) final bid offers and reviewed the process that had resulted in an attractive price for Liberty. The board considered the value of each offer and the liquidity each one provided to its stockholders, while also evaluating the merits of remaining independent and growing Liberty organically or through acquisitions. The board also considered the quality of Middlefield's operating performance as well as a relative valuation of Middlefield's stock that appeared to be attractive for those Liberty stockholders electing to receive stock. The board determined that the updated oral offer from Middlefield was in the best interest of the stockholders and authorized management to execute the latest indication of interest from Middlefield. Specifically, Middlefield's revised indication of interest provided for a price increase of approximately \$0.55 per share of Liberty common stock and inclusion of two (2) current directors of Liberty (Messrs. Bevan and Valerian) on the Middlefield board of directors immediately following the closing of the transaction. Middlefield's revised indication of interest also contemplated that, immediately prior to the consummation of the Merger, Liberty would distribute a \$12.5 million special dividend to its stockholders.

The parties executed the revised indication of interest on June 14, 2016 and began preparation of the Reorganization Agreement. Subsequently, Liberty's outside tax counsel reviewed Middlefield's revised indication of interest and, after consultation with and concurrence from Middlefield's outside tax counsel, determined that the proposed payment by Liberty of a \$12.5 million dividend to its stockholders immediately prior to completion of the Merger would adversely

affect the tax-free reorganization treatment of the Merger and the ability of Liberty's tax counsel to issue a favorable tax opinion. Following further discussions among the

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parties and their counsel, it was determined that the transaction should be restructured to reduce the Liberty special dividend from \$12.5 million to approximately \$3.0 million, increase the cash portion of the Merger consideration from 50% to 55% and decrease the common shares portion of the Merger consideration to 45%, while maintaining the same total transaction value. Over the next several weeks, the parties revised the draft Reorganization Agreement to reflect the latest structure of the transaction and negotiated its terms and conditions.

At a meeting of the board of directors on July 27, 2016, the board of directors reviewed in detail the draft Reorganization Agreement and also received the opinion from Boenning that the proposed Merger consideration was fair to Liberty's stockholders from a financial point of view. The board of directors authorized the execution of the Merger Agreement, and each member of the board of directors who owns Liberty common stock entered into a written agreement to vote all of the Liberty shares that he or she beneficially owns in favor of the approval of the transactions contemplated by the Reorganization Agreement.

Management of Liberty signed the Reorganization Agreement on behalf of Liberty as of July 28, 2016 on the terms approved by the board of directors.

Recommendation of Liberty's Board of Directors

The directors of Liberty believe that adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement are in the best interest of Liberty and its stockholders. Consequently, the directors unanimously recommend that Liberty stockholders adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement. The directors of Liberty have agreed to vote their shares of Liberty common stock in favor of the Merger Proposal.

Opinion of Liberty's Financial Advisor

Boenning is acting as financial advisor to Liberty in connection with the proposed Merger. Boenning is a registered broker-dealer providing investment banking services with substantial expertise in transactions similar to the proposed Merger. As part of its investment banking activities, Boenning is regularly engaged in the valuation of businesses and securities in connection with mergers, acquisitions, underwritings, private placements and valuations for estate, corporate and other purposes.

On July 27, 2016, Boenning rendered its oral opinion, which was subsequently confirmed in writing, to the Liberty board of directors that, as of such date and subject to the assumptions made, matters considered and limitations of the review undertaken by Boenning, the Merger consideration to be received by the holders of Liberty's common stock pursuant to the Reorganization Agreement was fair, from a financial point of view, to such holders.

The full text of Boenning's written opinion dated July 27, 2016, which sets forth the assumptions made, matters considered and limitations of the review undertaken, is attached as Annex C to this proxy statement. You are urged to, and should, read this opinion carefully and in its entirety in connection with this joint proxy statement/prospectus. The summary of Boenning's opinion set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of the opinion. Boenning's opinion speaks only as of the date of the opinion and does not reflect any developments that may occur or may have occurred after the date of its opinion and prior to the completion of the proposed Merger.

No limitations were imposed by Liberty on the scope of Boenning's investigation or the procedures to be followed by Boenning in rendering its opinion. Boenning was not requested to, and did not, make any recommendation to the Liberty board of directors as to the form or amount of the consideration to be paid to the Liberty stockholders, which

was determined through arm's length negotiations between the parties. In arriving at its opinion, Boenning did not ascribe a specific range of values to Liberty. Its opinion is based on the financial and comparative analyses described below.

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In connection with its opinion, Boenning, among other things:

- (i) reviewed the historical financial performance, current financial position and general prospects of each of Middlefield and Liberty and reviewed certain internal financial analyses and forecasts prepared by the respective management teams of Middlefield and Liberty;
- (ii) reviewed the proposed Reorganization Agreement;
- (iii) reviewed and analyzed the stock performance and trading history of Middlefield;
- (iv) studied and analyzed the consolidated financial and operating data of Middlefield and Liberty;
- (v) reviewed the pro forma financial impact of the proposed Merger on Middlefield, based on assumptions relating to transaction expenses, purchase accounting adjustments, cost savings and other synergies determined by the respective management teams of Middlefield and Liberty;
- (vi) considered the financial terms of the proposed Merger as compared with the financial terms of comparable bank and bank holding company mergers and acquisitions;
- (vii) met and/or communicated with certain members of each of Middlefield's and Liberty's senior management to discuss their respective operations, historical financial statements and future prospects; and

(viii) conducted such other financial analyses, studies and investigations as Boenning deemed appropriate. Boenning's opinion was given in reliance on information and representations made or given by Middlefield, Liberty, and their respective officers, directors, auditors, counsel and other agents, and on filings, releases and other information issued by each of Middlefield and Liberty including financial statements, financial projections, and stock price data as well as certain information from recognized independent sources. Boenning did not independently verify the information concerning Middlefield or Liberty nor any other data Boenning considered in its review and, for purposes of its opinion, Boenning assumed and relied upon the accuracy and completeness of all such information and data. Boenning assumed that all forecasts and projections provided to it had been reasonably prepared and reflected the best currently available estimates and good faith judgments of the respective management teams of Middlefield and Liberty as to their most likely future financial performance. Boenning expressed no opinion as to any financial projections or the assumptions on which they were based. Boenning did not conduct any valuation or appraisal of any assets or liabilities of Middlefield or Liberty, nor have any such valuations or appraisals been provided to Boenning. Additionally, Boenning assumed that the proposed Merger is, in all respects, lawful under applicable law.

With respect to anticipated transaction costs, purchase accounting adjustments, expected cost savings and other synergies and financial and other information relating to the general prospects of Middlefield and Liberty, Boenning assumed that such information had been reasonably prepared and reflected the best currently available estimates and

good faith judgment of the respective management teams of Middlefield and Liberty as to their most likely future performance. Boenning further relied on the assurances of the respective management teams of Middlefield and Liberty that they were not aware of any facts or circumstances that would make any of such information inaccurate or misleading. Boenning was not asked to and did not undertake an independent verification of any of such information and Boenning did not assume any responsibility or liability for the accuracy or completeness thereof. Boenning assumed that the allowance for loan losses indicated on the balance sheet of each of Middlefield and Liberty was adequate to cover such losses; Boenning did not review individual loans or credit files of Middlefield and Liberty. Boenning assumed that all of the representations and warranties contained in the reorganization Agreement and all related agreements were true and correct, that each party under the agreements will perform all of the covenants required to be performed by such party under the agreements, and that the conditions precedent in the agreements were not waived. Also, in rendering its opinion, Boenning assumed that in the course of obtaining the necessary regulatory approvals for the consummation of the proposed Merger no conditions will be imposed that will have a material adverse effect on the combined entity or contemplated benefits of the proposed Merger, including the cost savings and related expenses expected to result from the proposed Merger.

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Boenning's opinion is based upon information provided to it by the respective management teams of Middlefield and Liberty, as well as market, economic, financial and other conditions as they existed and could be evaluated only as of the date of its opinion and accordingly, it speaks to no other period. Boenning did not undertake to reaffirm or revise its opinion or otherwise comment on events occurring after the date of its opinion and did not have an obligation to update, revise or reaffirm its opinion. Boenning's opinion does not address the relative merits of the proposed Merger or the other business strategies that Liberty's board of directors has considered or may be considering, nor does it address the underlying business decision of Liberty's board of directors to proceed with the proposed Merger. Boenning's opinion is for the information of Liberty's board of directors in connection with its evaluation of the proposed Merger and does not constitute a recommendation to the board of directors of Liberty in connection with the proposed Merger or a recommendation to any stockholder of Liberty as to how such stockholder should vote or act with respect to the proposed Merger.

In connection with rendering its opinion, Boenning performed a variety of financial analyses that are summarized below. This summary does not purport to be a complete description of such analyses. Boenning believes that its analyses and the summary set forth herein must be considered as a whole and that selecting portions of such analyses and the factors considered therein, without considering all factors and analyses, could create an incomplete view of the analyses and processes underlying its opinion. The preparation of a fairness opinion is a complex process involving subjective judgments and is not necessarily susceptible to partial analysis or summary description. In arriving at its opinion, Boenning considered the results of all of its analyses as a whole and did not attribute any particular weight to any analyses or factors considered by it. The range of valuations resulting from any particular analysis described below should not be taken to be Boenning's view of the actual value of Liberty.

In its analyses, Boenning made numerous assumptions with respect to industry performance, business and economic conditions, and other matters, many of which are beyond the control of Liberty or Middlefield. Any estimates contained in Boenning's analyses are not necessarily indicative of actual future values or results, which may be significantly more or less favorable than suggested by such estimates. Estimates of values of companies do not purport to be appraisals or necessarily reflect the actual prices at which companies or their securities actually may be sold. No company or transaction utilized in Boenning's analyses was identical to Liberty or Middlefield or the proposed Merger. Accordingly, an analysis of the results described below is not mathematical; rather, it involves complex considerations and judgments concerning differences in financial and operating characteristics of the companies and other facts that could affect the public trading value of the companies to which they are being compared. None of the analyses performed by Boenning was assigned a greater significance by Boenning than any other, nor does the order of analyses described represent relative importance or weight given to those analyses by Boenning. The analyses described below do not purport to be indicative of actual future results, or to reflect the prices at which Liberty's common stock or Middlefield's common stock may trade in the public markets, which may vary depending upon various factors, including changes in interest rates, dividend rates, market conditions, economic conditions and other factors that influence the price of securities.

In accordance with customary investment banking practice, Boenning employed generally accepted valuation methods in reaching its opinion. The following is a summary of the material financial analyses that Boenning used in providing its opinion on July 27, 2016. Some of the summaries of financial analyses are presented in tabular format. In order to understand the financial analyses used by Boenning more fully, you should read the tables together with the text of each summary. The tables alone do not constitute a complete description of Boenning's financial analyses, including the methodologies and assumptions underlying the analyses, and if viewed in isolation could create a misleading or incomplete view of the financial analyses performed by Boenning. The summary data set forth below do not represent and should not be viewed by anyone as constituting conclusions reached by Boenning with respect to any of the analyses performed by it in connection with its opinion. Rather, Boenning made its determination as to the fairness to the holders of Liberty's common stock of the Merger consideration, from a financial point of view, on the basis of its

experience and professional judgment after considering the results of all of the analyses performed. Accordingly, the data included in the summary tables and the corresponding imputed ranges of value for Liberty should be

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considered as a whole and in the context of the full narrative description of all of the financial analyses set forth in the following pages, including the assumptions underlying these analyses. Considering the data included in the summary table without considering the full narrative description of all of the financial analyses, including the assumptions underlying these analyses, could create a misleading or incomplete view of the financial analyses performed by Boenning.

In connection with rendering its opinion and based upon the terms of the draft Agreement and Plan of Reorganization reviewed by it, Boenning assumed the effective aggregate indicated Merger consideration to be \$41.57 million and the per share Merger consideration to be \$42.14, based on Middlefield's closing stock price on July 26, 2016, of \$33.76.

Comparison of Selected Companies. Boenning reviewed and, as reflected in Table 1 below, compared the multiples and ratios of the offer price to Liberty's book value, tangible book value, latest 12 months earnings per share, assets, tangible book premium to core deposits, and deposits, such multiples referred to herein as the pricing multiples, with the median pricing multiples for the current trading prices, after the application of a 29.7% assumed control premium, referred to as the adjusted trading price, of the common stock of a peer group of 22 selected public banks and thrifts with assets between \$150 million and \$400 million, tangible common equity / tangible assets between 11% and 15% and latest 12 months return on average tangible common equity between 5% and 8.5%, excluding merger targets. The 29.7% equity control premium is the median one day stock price premium for all bank and thrift merger and acquisition deals announced since January 1, 2000, based on data from SNL Financial.

Table 1

| Pricing Multiple | Adjusted Trading Price Median Statistics for | |
|--|---|-----------------------|
| | Offer Price | Peer Group (1) |
| Price/Book Value | 130.3% | 129.0% |
| Price/Tangible Book Value | 130.3% | 129.0% |
| Price/Latest Twelve Months Core Earnings Per Share | 19.0x | 18.3x |
| Price/Assets | 18.7% | 15.3% |
| Premium over Tangible Book Value/Core Deposits | 5.6% | 4.6% |
| Price/Deposits | 21.9% | 18.6% |

(1) Peer metrics are based on prices as of market close on July 26, 2016.

Analysis of Bank Merger Transactions. Boenning analyzed certain information relating to recent transactions in the banking industry, consisting of (i) nine Midwest bank and thrift transactions announced since January 1, 2014 with target assets between \$100 million and \$600 million, tangible equity / tangible assets between 11% and 17%, latest 12 months return on average equity between 5% and 10%, and disclosed pricing, referred to below as Group A; and (ii) 17 nationwide bank and thrift deals announced since January 1, 2014 with target assets between \$150 million and \$400 million, tangible equity / tangible assets between 12% and 18%, latest 12 months return on average equity between 2% and 12%, and disclosed pricing, referred to below as Group B. As reflected in Table 2 below, Boenning then reviewed and compared the pricing multiples of the offer price and the median pricing multiples of the selected transaction values for Group A and Group B.

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| Pricing Multiple | The Merger | Median for Selected Transactions | |
|--|-------------------|---|----------------|
| | | Group A | Group B |
| Price/Book Value | 130.3% | 119.8% | 126.1% |
| Price/Tangible Book Value | 130.3% | 124.3% | 126.5% |
| Price/Latest Twelve Months Core Earnings Per Share | 19.0x | 21.4x | 25.2x |
| Price/Assets | 18.7% | 17.1% | 17.1% |
| Premium over Tangible Book Value/Core Deposits | 5.6% | 4.9% | 5.9% |
| Price/Deposits | 21.9% | 19.9% | 19.5% |

Discounted Cash Flow Analysis. Discounted cash flow analysis approximates the value of a share of stock to an acquiror by calculating the present value of the target's dividendable cash flow in perpetuity. This analysis assumed a short-term earnings growth rate of 5% and a long-term growth rate of 2%, as well as a short-term balance sheet growth rate of 3.5% and a long-term growth rate of 2%, based on guidance from Liberty's management. The estimated cost savings of 30% in year one, 35% in year two and 40% thereafter, transaction costs of \$3.1 million pre-tax and gross credit mark of approximately \$5.1 million, or 2.75% of loans (equal to \$1.8 million net of Liberty's loan loss reserve) were based on guidance provided by Middlefield. A discount rate of 13% was determined using the Capital Asset Pricing Model and the Build-Up Method, both of which take into account certain factors such as the current risk free rate, the beta of bank stocks compared to the broader market and the Ibbotson risk premiums for small, illiquid stocks and for commercial bank stocks, as well as comparable company returns on tangible common equity. The average of the three methods was approximately 13%. Sensitivity analyses for discount rates and cost savings ranged from 11% to 15% and 33.5% to 46.5%, respectively. The present value of Liberty common stock calculated using discounted cash flow analysis ranged from \$34.50 per share to \$55.26 per share based on the cost savings estimates and discount rates used, compared to the offer price of \$42.14 per share. This analysis does not purport to be indicative of actual future results and does not purport to reflect the prices at which shares of Liberty common stock may trade in the public markets. A discounted cash flow analysis was included because it is a widely used valuation methodology, but the results of such methodology are highly dependent upon the numerous assumptions that must be made, including earnings growth rates, dividend payout rates and discount rates.

Present Value Analysis. Applying present value analysis to Liberty's theoretical future earnings, dividends and tangible book value, Boenning compared the offer price for one share of Liberty's common stock to the present value of one share of Liberty's common stock on a stand-alone basis. The analysis was based upon management's projected earnings growth, a range of assumed price/earnings ratios, a range of assumed price/tangible book value ratios and a 13% discount rate, which was determined using the Capital Asset Pricing Model and the Build-Up Method, both of which take into account certain factors such as the current risk free rate, the beta of bank stocks compared to the broader market and the Ibbotson risk premiums for small, illiquid stocks and for commercial bank stocks, as well as comparable company returns on tangible common equity. The average of the three methods was approximately 13%. The valuation was completed with a sensitivity analysis on the discount rate ranging from 11% to 15%. Boenning derived the terminal price/earnings multiple of 15.8x and terminal price/tangible book value multiple of 123.7% from the three-year median trading multiples of the SNL Bank < \$500 Million Index as of July 26, 2016. Sensitivity analyses for terminal price/earnings and price/tangible book ranged from 11.4x to 20.2x and 103.4% to 144.0%, respectively. The present value of Liberty's common stock on a standalone basis is \$22.86 to \$45.10 per share based on price/earnings multiples, and \$22.55 to \$40.65 per share based on price/tangible book value multiples,

compared to the offer price of \$42.14 per share. This analysis does not purport to be indicative of actual future results and does not purport to reflect the prices at which shares of Liberty's common stock may trade in the public markets. A present value analysis was included because it is a widely used valuation methodology, but the results of such methodology are highly dependent upon the numerous assumptions that must be made, including earnings growth rates, dividend payout rates and discount rates.

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Pro Forma Merger Analysis. Boenning analyzed certain potential pro forma effects of the Merger, assuming the following: (i) the proposed Merger is completed December 31, 2016; (ii) each share of Liberty's common stock will be eligible to receive consideration of approximately \$42.14 consisting of a \$3.13 special cash dividend, \$20.88 in cash, and \$17.09 in Middlefield stock; (iii) estimated pre-tax cost savings of approximately 40% of Liberty's noninterest expense on an annual basis, recognized 75% in 2017 and 87.5% in 2018; (iv) estimated one-time transaction-related costs of approximately \$3.5 million pre-tax are expensed prior to closing; (v) Liberty performance was calculated in accordance with Liberty management's earnings forecasts; (vi) Middlefield's performance was calculated in accordance with Middlefield management's earnings forecasts; and (vii) certain other assumptions pertaining to costs and expenses associated with the transaction, intangible amortization, opportunity cost of cash and other items. The analyses indicated that, for the full years 2017 and 2018, the proposed Merger (excluding transaction expenses) would be accretive to the combined company's projected earnings per share and accretive to Liberty's per share equivalent earnings, tangible book value and dividends. Additionally, the combined company's regulatory capital ratios would exceed regulatory guidelines for well capitalized. The actual results achieved by the combined company may vary from projected results and the variations may be material.

As described above, Boenning's opinion was just one of the many factors taken into consideration by the Liberty board of directors in making its determination to approve the proposed Merger.

Boenning, as part of its investment banking business, regularly is engaged in the valuation of assets, securities and companies in connection with various types of asset and security transactions, including mergers, acquisitions, private placements, public offerings and valuations for various other purposes, and in the determination of adequate consideration in such transactions. In the ordinary course of Boenning's business as a broker-dealer, it may, from time to time, purchase securities from, and sell securities to, Middlefield, Liberty, and/or their respective affiliates. In the ordinary course of business, Boenning may also actively trade the securities of Middlefield and Liberty for its own account and/or for the accounts of customers and accordingly may at any time hold a long or short position in such securities.

Boenning is acting as Liberty's financial advisor in connection with the proposed Merger and will receive a customary fee for its services, a significant portion of which is contingent upon consummation of the Proposed Merger. Boenning also received a fee for rendering the fairness opinion. Boenning's fee for rendering the fairness opinion was not contingent upon any conclusion that Boenning reached or upon completion of the proposed Merger. The Company has also agreed to indemnify Boenning against certain liabilities that may arise out of Boenning's engagement.

Prior Engagements by Middlefield and Liberty. Boenning was engaged in February 2016 by Middlefield to serve as placement agent for a private placement of common stock. The offering ultimately closed on June 30, 2016, and Boenning was paid a commission for its role. Boenning advised, and received compensation from, Liberty in 2014 relating to the exploration of strategic alternatives, although no transaction was consummated at that time.

Except for the arrangements between Boenning and Liberty and Middlefield described in the preceding paragraphs, Boenning has not had any material relationship with either Middlefield or Liberty during the past two years in which compensation was received or was intended to be received. Boenning may provide services to Middlefield in the future (and/or to Liberty if the proposed Merger is not consummated), although as of the date of Boenning's opinion, there was no agreement to do so nor any mutual understanding that such services are contemplated.

Boenning's opinion was approved by Boenning's fairness opinion committee. Boenning did not express any opinion as to the fairness of the amount or nature of the compensation to be received in the proposed Merger by any of the officers, directors, or employees of any party to the reorganization Agreement, or any class of such persons, relative to the compensation to be received by the holders of Liberty's common stock in the proposed Merger.

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For a number of reasons, including the unpredictability of underlying assumptions and estimates, Liberty does not routinely publicly disclose forecasts or internal projections of future performance, earnings, or other results. However, Boenning considered financial projections provided by or reviewed with senior management of Liberty for the purpose of preparing the financial analyses supporting Boenning's fairness opinion, as described in this joint proxy statement/prospectus under the heading "Opinion of Liberty's Financial Advisor." In addition, Donnelly Penman & Partners Inc. considered internal financial projections provided by and/or reviewed with senior management of Liberty for the purpose of preparing the financial analyses supporting Donnelly Penman's fairness opinion, as described in this joint proxy statement/prospectus under the heading "Opinion of Middlefield's Financial Advisor." A summary of these projections is therefore included in this joint proxy statement/prospectus because the projections were considered by Boenning and by Donnelly Penman in preparing their analyses.

When the financial projections were prepared, they represented the best estimates and judgments of Liberty management about future financial performance. The financial projections summarized below were prepared in good faith, but financial projections are subjective in many respects and are susceptible to interpretation and periodic revision based on actual experience and recent developments. Accordingly, financial projections do not reliably predict future operating results. The financial projections were not prepared with the expectation of public disclosure or with the goal of complying with American Institute of Certified Public Accountants guidelines for prospective financial information or SEC guidelines regarding forward-looking statements. Although presented with numeric specificity, the financial projections reflect numerous estimates and assumptions that might not be realized and are subject to significant uncertainties and contingencies, many of which are beyond Liberty's control. For these reasons and because of the uncertainties inherent in financial projections, Liberty stockholders and Middlefield stockholders should not unduly rely on these financial projections as predictions of future operating results.

The financial projections of Liberty included in this joint proxy statement/prospectus were prepared by and are the responsibility of Liberty management. Neither Liberty's independent registered public accounting firm nor any other independent accounting firm examined, compiled, or performed any procedures on these financial projections, and therefore express no opinion or any other form of assurance regarding the financial projections. Inclusion of the financial projections in this joint proxy statement/prospectus is not an admission or representation by Liberty or Middlefield that Liberty or Middlefield consider the financial projections to be material information.

All of the financial projections are forward-looking statements. The estimates and assumptions underlying the financial projections summarized below involve judgments regarding future economic, competitive, regulatory, and financial market conditions and future business decisions. The estimates and assumptions may not be realized and are inherently subject to significant business, economic, competitive, and regulatory uncertainties, all of which are difficult to predict and many of which are beyond Liberty's control. In addition, these financial projections represent Liberty's evaluation at the time the projections were prepared of its future financial performance on a stand-alone basis, and without reference to the proposed Merger or transaction-related costs or benefits. Accordingly, Liberty gives no assurance that the projected results will be realized or that actual results will not differ materially from those presented in the financial projections. Inclusion of these financial projections should not be interpreted as a statement that Liberty or Middlefield considers this information a reliable prediction of future results, or that the projections would be the same if prepared by Liberty as of the date of this document, and this information should not be unduly relied on for that purpose.

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Liberty provided to Boenning and Donnelly Penman the following estimate of per share earnings on a stand-alone basis for the period 2017 through 2020, based on its internal strategic plan for 2016-2018 and forward growth expectations for 2019 and beyond:

| | Year ended December 31, | | | |
|---|-------------------------|------|------|------|
| | 2017 | 2018 | 2019 | 2020 |
| EPS stand-alone | 2.39 | 2.85 | 3.14 | 3.30 |
| Middlefield's Reasons for the Merger | | | | |

Middlefield's board of directors believes the Merger is in the best interests of Middlefield and its stockholders and therefore unanimously approved the transactions contemplated by the Reorganization Agreement and the Merger. The board reached this decision after consulting with management and with Middlefield's financial and legal advisors. The board's reasoning was based on many factors, including but not limited to the following:

the Merger will expand Middlefield's northeastern Ohio business into Cuyahoga County and Summit County, two counties to the immediate west and south of Middlefield's market but contiguous to Middlefield's market

Liberty has a diversified loan portfolio, but its primary focus on commercial lending opportunities targeted to professionals and small business owners is compatible with Middlefield's goals and could allow for significant lending growth in these markets

the Merger will make Middlefield a leading community banking organization in desirable markets within northeastern Ohio, adding scale, profitability, and growth potential

Middlefield anticipates that eliminating back office redundancies will lead to savings opportunities

although there are regional and national financial institutions in northeastern Ohio with significantly greater assets, at approximately \$1.0 billion in total assets after the Merger Middlefield will not lose its identity as a community banking organization but it will have improved economies of scale to compete more effectively in an increasingly competitive and increasingly concentrated banking market, along with enhanced growth opportunities through three productive new offices in the Cleveland and Akron markets

the resulting institution will have a stronger regional presence and greater brand recognition

Liberty customers will have access to a broader range of banking products and services from a bank with greater lending authority

Liberty's SBA lending will be a positive addition to Middlefield's lending products, potentially also generating income from sale of the government-guaranteed portion of the SBA loan portfolio

The Middlefield Banking Company and Liberty are compatible organizations because of similar strategies and a shared customer focus and community orientation

the pro forma financial aspects of the Merger are favorable, with an estimated earnings per share accretion in 2017 of over 38% and an estimated internal rate of return exceeding 20%, with a manageable three- to four-year period to earn back the approximately 16% anticipated tangible book value dilution

when Liberty board members William A. Valerian and Thomas W. Bevan become Middlefield board members at Merger closing their insights about Middlefield's expanded market in Cuyahoga and Summit Counties will enable Middlefield to take greater advantage of competitive opportunities in that expanded market

The continued employment of many Liberty personnel will help with the transition of customers, employees, and the Liberty community, reducing the Merger's potential execution risk

The Middlefield Banking Company will continue to be well capitalized after the Merger

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based on improved performance and collections of charged off loans, an opportunity exists to collect on student loans previously charged off by Liberty Middlefield's board of directors considered many factors in its evaluation. The board did not quantify or assign relative weights to any individual factors in its decision.

Recommendation of Middlefield's Board of Directors

Middlefield's board of directors unanimously approved the transactions contemplated by the Reorganization Agreement and the issuance of common stock in the Merger. The board believes the Merger and the common stock issuance are in the best interests of Middlefield and its stockholders. Accordingly, the directors unanimously recommend that Middlefield stockholders vote **FOR** adoption and approval of the Reorganization Agreement and **FOR** issuance of common stock in the Merger.

Opinion of Middlefield's Financial Advisor

On April 19, 2016 Middlefield's board of directors retained Donnelly Penman to provide merger advisory services. As part of the engagement, Donnelly Penman was asked to assess the fairness to Middlefield stockholders, from a financial point of view, of the approximately \$40.0 million consideration being paid.

Donnelly Penman is a regional investment banking firm headquartered in Grosse Pointe, Michigan. Donnelly Penman is continually engaged in the valuation of businesses and securities in mergers and acquisitions, in secondary distributions of securities, and in private placements, as well as valuations for going-private transactions, corporate, and other purposes.

Donnelly Penman representatives attended the July 27, 2016 meeting at which Middlefield's board of directors evaluated and ultimately approved the Reorganization Agreement and proposed Merger. At this meeting Donnelly Penman reviewed the financial aspects of the proposed transaction and rendered an opinion that as of such date the approximately \$40.0 million consideration being paid, including the cash and stock consideration payable to Liberty stockholders in exchange for their Liberty common stock, the approximately \$3.0 million special dividend to be declared by Liberty before closing, and the cash payable in cancellation of Liberty's outstanding options and phantom stock, was fair from a financial point of view to Middlefield stockholders.

The full text of Donnelly Penman's written opinion is attached as Annex D to this joint proxy statement/prospectus. The following summary of the opinion is qualified in its entirety by reference to the full text of the opinion in Annex D. You should read the opinion in its entirety for a description of the procedures followed, assumptions made, matters considered, and qualifications and limitations on the review undertaken by Donnelly Penman. Donnelly Penman's opinion is necessarily based upon economic and market conditions and other circumstances as they existed and were evaluated on the date of the opinion.

Donnelly Penman's opinion speaks only as of the date of the opinion. The opinion is directed to Middlefield's Board of Directors and addresses only the fairness to Middlefield stockholders, from a financial point of view, of the consideration being paid. It does not address the underlying business decision to proceed with the Merger and does not constitute a recommendation to any stockholder about how the stockholder should vote regarding the Merger.

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Donnelly Penman discussed current business operations, financial conditions and prospects of Middlefield and Liberty the management teams of Middlefield and Liberty, in addition to discussions with independent directors of Middlefield. The resources Donnelly Penman reviewed in the process of forming its fairness opinion also include but are not limited to the following:

the July 28, 2016 Reorganization Agreement and exhibits

public information of Middlefield, including audited financial statements and Form 10-Ks for the years ended December 31, 2015, 2014 and 2013, interim financial results for the six months ended June 30, 2016 and 2015 as disclosed in Form 10-Q, and the quarterly call reports of The Middlefield Banking Company for the periods March 31, 2016 and December 31, September 30, June 30, and March 31, 2015

the capital ownership structure of Middlefield, including information about Middlefield's private offering of common stock in May and June of 2016

historical market prices and trading volume of Middlefield common stock

historical and forecasted financial information relating to earnings, dividends, assets, liabilities, and prospects of Middlefield furnished and deemed reasonable by Middlefield's senior management

Middlefield senior management's projected earnings estimates for fiscal years 2016 through 2018, which Donnelly Penman extrapolated into fiscal year 2020

nonpublic information about Liberty made available in the due diligence process, including Liberty's audited financial statements for the years ended December 31, 2015, 2014, and 2013, as well as publicly available information, including Liberty's quarterly call reports for quarters ended on June 30 and March 31, 2016 and December 31, September 30, June 30, and March 31, 2015

Liberty's problem loan reports as of March 31 and June 30, 2016

Liberty senior management's projected earnings estimates for fiscal years 2016 through 2018, which Donnelly Penman extrapolated into fiscal year 2020

valuation analyses of Middlefield that Donnelly Penman performed, including analysis of comparable transactions, a dividend discount model analysis on a standalone basis for Middlefield and on a pro forma basis including Liberty, and analysis of comparable public companies to Middlefield on a standalone and pro forma basis

a summary merger model of the pro forma impact of the transaction to Middlefield

a contribution analysis of Middlefield and Liberty to the combined entity as of June 30, 2016, and

other information, financial studies, analyses, investigations, and factors that Donnelly Penman deemed relevant

Donnelly Penman also discussed with Middlefield management past and current business operations, regulatory relations, financial condition, future prospects, and other matters. Donnelly Penman also discussed with Liberty management that bank's business operations, regulatory relations, earnings results, and future prospects.

Donnelly Penman relied upon the accuracy and completeness of all financial and other information provided to it or publicly available, and did not assume responsibility for the accuracy, completeness, or reasonableness of or responsibility for verification of the information. Donnelly Penman did not make any independent evaluations, valuations, or appraisals of the assets or liabilities of Middlefield or Liberty, did not review individual credit files, and assumed that the aggregate allowances for credit losses relating to the loans of Middlefield and Liberty are and will continue to be adequate to cover losses. Donnelly Penman relied upon Middlefield management regarding the reasonableness and achievability of the financial and operating forecasts and projections (and the

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assumptions and bases therefor) prepared by and provided by Middlefield management, and similarly relied on Liberty management regarding the reasonableness and achievability of the financial and operating forecasts and projections (and the assumptions and bases therefor) prepared by and provided by Liberty management. Donnelly Penman assumed that the forecasts and projections of Middlefield management reflect management's best currently available estimates and judgments and that the forecasts and projections will be realized in the amounts and in the time periods estimated and that they provide a reasonable basis for Donnelly Penman's opinion. Likewise, Donnelly Penman assumed that the forecasts and projections of Liberty management reflect Liberty management's best currently available estimates and judgments and that the forecasts and projections will be realized in the amounts and in the time periods estimated and that they provide a reasonable basis for Donnelly Penman's opinion. The Middlefield and Liberty forecasts and projections were not prepared with the expectation of public disclosure. The projected financial information is based on numerous variables and assumptions that are inherently uncertain, including without limitation factors related to general economic and competitive conditions. Accordingly, actual results could vary significantly from projected results. Donnelly Penman relied on the projected information without independent verification or analysis. Donnelly Penman relied upon the assurance of Middlefield management and Liberty management that they were unaware of any facts that would make the information provided or available to Donnelly Penman incomplete or misleading.

The following is a summary of the material analyses presented by Donnelly Penman to the Middlefield's board of directors on July 27, 2016. The Donnelly Penman opinion was not the only factor taken into consideration by Middlefield's board of directors in the board's decision to approve the Reorganization Agreement and the Merger. Consequently, the analyses described below were not determinative in the board's decision. The summary is not a complete description of the analyses underlying the Donnelly Penman opinion or the presentation made by Donnelly Penman to Middlefield's board of directors, but summarizes the material analyses performed and presented. The preparation of a fairness opinion is a complex analytic process. Donnelly Penman did not attribute any particular weight to any analysis or factor it considered, but rather made qualitative judgments about the significance and relevance of each analysis and factor. The financial analyses summarized below include information presented in tabular format. The tables alone do not constitute a complete description of the financial analyses. Accordingly, Donnelly Penman believes that its analyses and the summary of its analyses must be considered as a whole and that selecting portions of its analyses and factors or focusing on the information presented below in tabular format, without considering all analyses and factors or the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of the process underlying its analyses and opinion.

The summary of Donnelly Penman's analyses to follow includes a summary of its analysis of comparable transactions, analysis of a dividend discount model on a stand-alone basis for Middlefield (stand-alone meaning without taking the Merger into account) and on a pro forma, post-merger basis, analysis of tangible book value dilution and earnings accretion attributable to the Merger, analysis of comparable public companies to Middlefield on a stand-alone basis and pro forma basis, and finally a contribution analysis that considers the anticipated 18.7% pro forma outstanding shares of Middlefield common stock held by Liberty stockholders relative to the percentage contribution of Liberty assets, loans, deposits, and tangible common equity to the pro forma combined entity. Donnelly Penman made numerous assumptions regarding industry performance, business and economic conditions, and other matters, many of which are beyond the control of Middlefield and Liberty. Credit, financial, and stock markets can experience unusual volatility. No company or merger included in Donnelly Penman's analysis is identical to Middlefield or Liberty and the comparable transactions considered by Donnelly Penman are not identical to the proposed Merger. Accordingly, Donnelly Penman's analyses are not based solely on arithmetic calculations but instead involve complex considerations and judgments concerning differences in financial and operating characteristics of the relevant companies, the timing of the relevant mergers and prospective buyer interests, as well as other factors that could affect the public trading markets of companies to which Middlefield is being compared. None of the analyses performed by

Donnelly Penman was assigned a greater significance than any other.

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Comparable Transaction Analysis. Donnelly Penman reviewed publicly available information related to comparable acquisitions of banks and bank holding companies as well as thrifts and thrift holding companies. The selection criteria were (1) transaction announcement after June 30, 2014, (2) total assets of acquired company between \$100 and \$300 million, (3) last twelve month (LTM) return on average assets (ROAA) of acquired company between 0.75% and 1.00%, and (4) nonperforming assets as a percent of total assets of acquired company less than 3.0%. Based on these criteria, Donnelly Penman identified 22 comparable acquisition transactions on a national level

| Acquiring company | Acquired company |
|--|--|
| 1) Arbor Bancorp, Inc. | Birmingham Bloomfield Bancshares, Inc. |
| 2) Oakstar Bancshares, Inc. | Bank of Urbana |
| 3) Pinnacle Financial Corporation | Independent Bank of Georgia |
| 4) Nacogdoches Commercial Bancshares, Inc. | First National Bank of Emory |
| 5) Cascade Bancorp | Prime Pacific Financial Services |
| 6) Boscobel Bancorp, Inc. | Rural Bancshares of Wisconsin, Inc. |
| 7) Citizens Community Bancorp, Inc. | Community Bank of Northern Wisconsin |
| 8) Horizon Bancorp | Kosciusko Financial, Inc. |
| 9) County Bancshares, Inc. | First Live Oak Bancshares, Inc. |
| 10) Franklin Financial Network, Inc. | Civic Bank & Trust |
| 11) CVB Financial Corp. | County Commerce Bank |
| 12) Community Bank Holdings of Texas, Inc. | StarBanc Holding Company |
| 13) WSB Bancshares, Inc. | XIT Bancshares, Inc. |
| 14) Town and Country Financial Corporation | West Plains Investors, Inc. |
| 15) Glacier Bancorp, Inc. | Canon Bank Corporation |
| 16) Southern States Bancshares, Inc. | Columbus Community Bank |
| 17) Carolina Alliance Bank | PBSC Financial Corporation |
| 18) Hambac, Inc. | Kentucky Home Bancshares, Inc. |
| 19) Pacific Continental Corporation | Capital Pacific Bancorp |
| 20) Partnership Community Bancshares, Inc. | Partnership Bank |
| 21) Pilgrim Bancorporation | North Central Texas Bancshares, Inc. |
| 22) Community Bancshares, Inc. | Citizens Bank of Ashville, Ohio |

Donnelly Penman considered the transaction price per share as a percent of the acquired company's June 30, 2016 book value, as a percent of the acquired company's tangible book value as of that date, as a multiple of the acquired company's LTM earnings per share in the twelve-month period ended June 30, 2016, and as a percent of the acquired company's June 30, 2016 core deposits, which generally consist of total deposits other than time deposits exceeding \$100,000. For comparison purposes, Donnelly Penman calculated the total transaction price to be \$40.6 million, or \$42.28 per share, which is derived from an estimated \$16,387,359 stock consideration to be issued in the Merger in exchange for 45% of Liberty's 959,283 outstanding shares and an estimated \$23,027,910 cash consideration. The cash component includes not only cash Merger consideration payable in exchange for Liberty common stock but also the \$3.0 million special dividend and the approximately \$1.1 million payable for cancellation of outstanding shares and phantom stock. As a percent of book value, tangible book value, LTM earnings per share, and core deposits, the \$42.28 per share price is

| deal value relative to . . . | comparable transactions | | | national |
|-------------------------------------|--------------------------------|---------------|--|-----------------|
| | minimum | median | | maximum |

| | Middlefield/Liberty merger | | 25th percentile | | 75th percentile | |
|-----------------------------|---------------------------------------|--------|---------------------------------------|--------|---------------------------------------|--------|
| book value | 1.307x | 1.022x | 1.245x | 1.411x | 1.496x | 1.839x |
| tangible book value | 1.307x | 1.022x | 1.245x | 1.411x | 1.496x | 1.839x |
| LTM EPS | 19.12x | 12.33x | 17.87x | 19.58x | 22.18x | 25.51x |
| core deposit premium | 5.16% | 0.36% | 4.60% | 6.10% | 9.05% | 17.77% |

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Of the 22 comparable acquisition transactions on a national level, nine are transactions of companies in the greater Midwest

| Acquiring company | Acquired company |
|---|--|
| 1) Arbor Bancorp, Inc. | Birmingham Bloomfield Bancshares, Inc. |
| 2) Oakstar Bancshares, Inc. | Bank of Urbana |
| 3) Boscobel Bancorp, Inc. | Rural Bancshares of Wisconsin, Inc. |
| 4) Citizens Community Bancorp, Inc. | Community Bank of Northern Wisconsin |
| 5) Horizon Bancorp | Kosciusko Financial, Inc. |
| 6) Town and Country Financial Corporation | West Plains Investors, Inc. |
| 7) Hambac, Inc. | Kentucky Home Bancshares, Inc. |
| 8) Partnership Community Bancshares, Inc. | Partnership Bank |
| 9) Community Bancshares, Inc. | Citizens Bank of Ashville, Ohio |

As a percent of book value, tangible book value, LTM earnings per share, and core deposits for this regional group, the \$42.28 per share price is

| deal value relative to . . . | Middlefield/Liberty | | comparable transactions | | Midwest | |
|-------------------------------------|----------------------------|----------------|-----------------------------------|---------------|-----------------------------------|----------------|
| | merger | minimum | 25th percentile | median | 75th percentile | maximum |
| book value | 1.307x | 1.022x | 1.148x | 1.409x | 1.413x | 1.839x |
| tangible book value | 1.307x | 1.022x | 1.148x | 1.409x | 1.413x | 1.839x |
| LTM EPS | 19.12x | 12.33x | 18.21x | 19.59x | 19.95x | 20.89x |
| core deposit premium | 5.16% | 0.36% | 3.42% | 4.48% | 6.29% | 8.27% |

None of the companies or 22 transactions used as a comparison in these analyses is identical to Liberty, Middlefield, or the Merger. Analysis of these results is not solely mathematical, but instead involves complex considerations and judgments concerning differences in financial and operating characteristics of the companies.

Dividend Discount Model Analysis. Donnelly Penman performed a discounted cash flow analysis of Middlefield on a stand-alone basis and on a pro forma, post-merger basis, estimating the value of a share of Middlefield common stock to be \$34.56 on a stand-alone basis and \$45.14 pro forma. These estimated values are the sum of two estimated values discounted back to the hypothetical December 31, 2016 merger date: (x) cash dividends for the five year period 2016 through 2020 and (y) residual or terminal value at the end of the five-year period. To determine present value, Donnelly Penman used a 13.00% discount rate.

Donnelly Penman's estimate assumes Middlefield's dividend remains constant at \$1.08 annually both on a stand-alone basis and pro forma, post-merger. The per share values also assume Middlefield's outstanding shares increase by 20,000 annually through Middlefield's dividend reinvestment plan, with pro forma outstanding shares including the estimated 515,164 shares issuable to Liberty stockholders in the Merger. At a 13.00% discount rate, the present value of the five-year projected cash dividend income is \$3.56 on a stand-alone and pro forma basis. For the estimated total \$34.56 value of Middlefield on a stand-alone basis and \$45.14 estimated pro forma value, the residual or terminal value at the end of the five-year period is derived by taking the average of a multiple of 1.40 times projected book value at the end of 2020 and 15.0 times projected 2020 net income, discounting that average value back to the December 31, 2016 hypothetical merger date at 13.0%. To derive the estimated stand-alone value, Donnelly Penman used Middlefield management's forecasted figures for 2016 through 2018, extrapolating from that at 8.00% annual

growth for the years 2019 and 2020. Likewise, to derive the estimated pro forma, post-merger value Donnelly Penman used Middlefield management's and Liberty management's forecasts for 2016 through 2018, extrapolating at 8.00% annual growth for the years 2019 and 2020. Net income assumes Middlefield's effective tax rate is 22%. Because the projected allowance for loan losses at the end of 2018 is projected to exceed 1.25%, the pro forma estimate assumes no additional provision expense attributable to Liberty in the years 2017 and 2018, but earnings are based on a slower growth rate

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thereafter to anticipate provision expense in 2019 and 2020. For purposes of the pro forma estimate, Middlefield management estimates a 30% reduction of Liberty's noninterest expense in 2017 and 35% thereafter.

Discounted cash flow present value analysis is a widely used valuation methodology, but it relies on numerous assumptions and estimates, including but not limited to asset and earnings growth rates, discount rates, and multiples of earnings or book value or both to derive residual or terminal values. The numeric per share result of the analysis is not the stock's actual value or expected value. It is merely an estimate within a broad range of potential value estimates.

Tangible Book Value Dilution and Earnings Accretion. Donnelly Penman estimates that Middlefield's tangible book value per share at December 31, 2016 would be \$33.52 without taking the Merger into account, with 16.3% dilution, or \$5.46 dilution per share, on a pro forma, post-merger basis at December 31, 2016. The Middlefield Banking Company's pro forma Tier 1 leverage ratio would be 7.71%, with pro forma Total Risk-Based Capital of 10.89% and pro forma Tangible Common Equity as a percent of tangible assets at 8.32%. Donnelly Penman estimates that the dilution of tangible book value could be eliminated, or earned back, in a period ranging from three to four years, which is consistent with the 3.9 year median period to earn back tangible book value dilution in a group of nine recent acquisitions examined by Donnelly Penman. Those nine transactions were announced between July 2, 2013 and June 2, 2016, with the first three transactions not yet completed on the date of Donnelly Penman's analysis in July 2016. The nine transactions involve acquired companies in Ohio, Indiana, Pennsylvania, and Michigan, with total deal values ranging from \$30 million to \$50 million

| Acquiring company | Acquired company |
|-------------------------------------|------------------------------|
| 1) Prudential Bancorp, Inc. | Polonia Bancorp, Inc. |
| 2) DNB Financial Corporation | East River Bank |
| 3) CNB Financial Corporation | Lake National Bank |
| 4) NexTier Incorporated | Eureka Financial Corporation |
| 5) First Merchants Corporation | Community Bancshares, Inc. |
| 6) Peoples Bancorp Inc. | North Akron Savings Bank |
| 7) MainSource Financial Group, Inc. | MBT Bancorp |
| 8) Peoples Bancorp Inc. | Ohio Heritage Bancorp, Inc. |
| 9) Peoples Bancorp Inc. | Ohio Commerce Bank |

Comparable Public Company Analysis. Donnelly Penman also analyzed a group of 20 publicly traded companies Donnelly Penman considers comparable to Middlefield on a stand-alone basis because of location, asset size, and return on average assets (ROAA). The companies are all located in the Midwest or the greater Midwest region, have total assets between \$500 million and \$1.0 billion, and have an ROAA between 0.75% and 1.25%. Taking their stock price as of July 22, 2016 and using publicly available data, Donnelly Penman determined that the companies' price to book value, price to tangible book value, and price to LTM EPS (as of June 30, 2016) are

| | 7/22/2016 price to 6/30/2016 book value | 7/22/2016 price to 6/30/2016 tangible book value | 7/22/2016 price to LTM EPS as of 6/30/2016 |
|---------------|--|---|--|
| low | 78.03% | 80.94% | 7.16x |
| median | 99.48% | 108.23% | 10.82x |

| | | | |
|--------------------|---------|---------|--------|
| mean | 101.00% | 111.31% | 11.16x |
| high | 149.01% | 166.16% | 18.73x |
| Middlefield | 96.90% | 103.03% | 9.27x |

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The 20 companies matching Donnelly Penman's criteria are

| | |
|-------------------------------------|-----------------------------------|
| Blackhawk Bancorp, Inc. | BNCCORP, Inc. |
| Cortland Bancorp | Croghan Bancshares, Inc. |
| CSB Bancorp, Inc. | F.S. Bancorp |
| First Bankers Trustshares, Inc. | First Capital, Inc. |
| First Savings Financial Group, Inc. | Guaranty Federal Bancshares, Inc. |
| Heartland BancCorp | HMN Financial, Inc. |
| Kentucky Bancshares, Inc. | Landmark Bancorp, Inc. |
| NorthWest Indiana Bancorp | Ohio Valley BancCorp. |
| PSB Holdings, Inc. | SB Financial Group, Inc. |
| Southern Michigan Bancorp, Inc. | United Bancshares, Inc. |

Donnelly Penman identified a similar group of 18 publicly traded companies that Donnelly Penman considers comparable to Middlefield on a pro forma, post-merger basis, based on an asset size range of \$800 million to \$1.5 billion, again limited to companies located in the greater Midwest and with ROAA between 0.75% and 1.25%. Taking their stock price as of July 22, 2016 and using publicly available data, Donnelly Penman determined that the companies' price to book value, price to tangible book value, and price to LTM EPS (as of June 30, 2016) are

| | 7/22/2016 price to 6/30/2016 book value | 7/22/2016 price to 6/30/2016 tangible book value | 7/22/2016 price to LTM EPS as of 6/30/2016 |
|--------------------|--|--|--|
| low | 84.17% | 85.72% | 8.08x |
| median | 112.49% | 129.44% | 12.78x |
| mean | 119.01% | 129.15% | 12.58x |
| high | 153.32% | 163.77% | 17.71x |
| Middlefield | 96.90% | 103.03% | 9.27x |

The 18 companies matching Donnelly Penman's criteria for companies comparable to Middlefield on a pro forma basis are

| | |
|---------------------------------|--|
| Ames National Corporation | Bank First National Corporation |
| Civista Bancshares Inc. | Farmers & Merchants Bancorp, Inc. |
| First Bankers Trustshares, Inc. | First Community Financial Partners, Inc. |
| Foresight Financial Group, Inc. | Independent Alliance Banks, Inc. |
| Kentucky Bancshares, Inc. | Landmark Bancorp, Inc. |
| LCNB Corp. | MBT Financial Corp. |
| Mutual First Financial, Inc. | NorthWest Indiana Bancorp |
| Ohio Valley BancCorp | Security National Corporation |
| Southern Missouri Bancorp, Inc. | Tri City Bankshares Corporation |

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Contribution Analysis. Assuming there are 515,164 shares of Middlefield common stock issued in the Merger to Liberty stockholders, Liberty stockholders will possess 18.7% of total pro forma shares outstanding but will contribute an average of 23.9% to the combined entity in terms of the entity's total assets, total loans, total deposits, and tangible common equity as of June 30, 2016, and 2015 net income and last twelve months (as of June 30, 2016) net income

| (in \$000s) | | percent contribution | | | |
|-------------------------------|----------------------|----------------------|-------------|---------|-------------|
| | | Liberty | Middlefield | Liberty | Middlefield |
| total assets | June 30, 2016 | 222,570 | 760,108 | 22.6% | 77.4% |
| total loans | June 30, 2016 | 181,479 | 579,716 | 23.8% | 76.2% |
| total deposits | June 30, 2016 | 189,874 | 628,040 | 23.2% | 76.8% |
| tangible common equity | June 30, 2016 | 31,024 | 72,966 | 29.8% | 70.2% |
| 2015 net income | | 1,791 | 6,865 | 20.7% | 79.3% |
| LTM net income | | 2,122 | 7,145 | 22.9% | 77.1% |
| average | | | | 23.9% | 76.1% |

The contribution analysis assumes there are 2,762,068 shares outstanding after the Merger. Accounting adjustments under ASC 805 (formerly FAS 141R) are not taken into account.

Relationships. Donnelly Penman & Partners acted exclusively for the Middlefield board of directors in rendering the opinion included as Annex D to this joint proxy statement/prospectus. Donnelly Penman will receive a fee from Middlefield for its services. Donnelly Penman has also acted as Middlefield's advisor for the Merger transaction, and a portion of Donnelly Penman's fee is contingent on the Merger's successful completion. Middlefield agreed to pay Donnelly Penman a \$40,000 fee for the fairness opinion, agreeing to pay an additional \$5,000 for each fairness opinion update. Additionally, Middlefield paid Donnelly Penman an initial advisory fee of \$12,500 at execution of the April 19, 2016 engagement letter agreement and an additional advisory fee of \$12,500 after Liberty identified Middlefield as one of the bidders invited to submit final bids. The advisory fees will be credited against the success fee payable to Donnelly Penman at Merger closing. The total success fee is \$250,000, including a nonrefundable \$75,000 portion that Middlefield paid when the Reorganization Agreement was signed. Donnelly Penman will receive the remaining portion of the success fee when the Merger is completed (\$150,000, after crediting of the advisory fees). Middlefield agreed to reimburse Donnelly Penman for up to \$7,500 of reasonable and customary out-of-pocket expenses and disbursements, also agreeing to indemnify Donnelly Penman against liabilities incurred for its services. The initial term of the engagement agreement ends December 31, 2016.

Donnelly Penman has provided advisory services to Middlefield in the past, including a March 2015 engagement concerning a potential acquisition, which did not lead to an acquisition transaction but for which Middlefield paid Donnelly Penman a retainer fee, and an October 2015 engagement concerning another potential acquisition, which also did not lead to an acquisition transaction but for which Middlefield paid Donnelly Penman a retainer. Donnelly Penman has never been engaged by Liberty for any purpose.

Nonpublic Financial Projections Provided to Middlefield's Financial Advisor

For a number of reasons, including the unpredictability of underlying assumptions and estimates, Middlefield does not routinely publicly disclose forecasts or internal projections of future performance, earnings, or other results. However, Donnelly Penman & Partners Inc. used financial projections provided by or reviewed with senior management of Middlefield for the purpose of preparing the financial analyses supporting Donnelly Penman's fairness opinion, as described in this joint proxy statement/prospectus under the heading "Opinion of Middlefield's Financial Advisor." A

summary of these projections is included in this joint proxy statement/prospectus because the projections were used by Donnelly Penman.

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When the financial projections were prepared, they represented the best estimates and judgments of Middlefield management about future financial performance. The financial projections summarized below were prepared in good faith, but financial projections are subjective in many respects and are susceptible to interpretation and periodic revision based on actual experience and recent developments. Accordingly, financial projections do not reliably predict future operating results. The financial projections were not prepared with the expectation of public disclosure or with the goal of complying with American Institute of Certified Public Accountants guidelines for prospective financial information or SEC guidelines regarding forward-looking statements. Although presented with numeric specificity, the financial projections reflect numerous estimates and assumptions that might not be realized and are subject to significant uncertainties and contingencies, many of which are beyond the control of Middlefield. For these reasons and because of the uncertainties inherent in financial projections, Liberty stockholders and Middlefield stockholders should not unduly rely on these financial projections as predictions of future operating results.

The financial projections of Middlefield included in this joint proxy statement/prospectus were prepared by and are the responsibility of Middlefield management. Neither Middlefield's independent registered public accounting firm nor any other independent accounting firm examined, compiled, or performed any procedures on these financial projections, and therefore express no opinion or any other form of assurance regarding the financial projections. Inclusion of the financial projections in this joint proxy statement/prospectus is not an admission or representation by Liberty or Middlefield that Liberty or Middlefield consider the financial projections to be material information.

All of the financial projections are forward-looking statements. The estimates and assumptions underlying the financial projections summarized below involve judgments regarding future economic, competitive, regulatory, and financial market conditions and future business decisions. The estimates and assumptions might not be realized and are inherently subject to significant business, economic, competitive, and regulatory uncertainties, all of which are difficult to predict and many of which are beyond the control of Middlefield. In addition, these financial projections represent Middlefield's evaluation at the time the projections were prepared of its future financial performance on a stand-alone basis, and without reference to the proposed merger or transaction-related costs or benefits. Accordingly, Middlefield gives no assurance that the projected results will be realized or that actual results will not differ materially from those presented in the financial projections. Inclusion of these financial projections should not be interpreted as a statement that Liberty or Middlefield considers this information a reliable prediction of future results, or that the projections would be the same if prepared by Middlefield as of the date of this document, and this information should not be unduly relied on for that purpose.

Middlefield provided to Donnelly Penman & Partners Inc. the following estimate of per share earnings for the period 2017 through 2020, both for Middlefield on a stand-alone basis and on a pro forma, post-merger basis:

| | year ended December 31, | | | |
|------------------------|--------------------------------|-------------|-------------|-------------|
| | 2017 | 2018 | 2019 | 2020 |
| EPS stand-alone | 3.16 | 3.57 | 3.82 | 4.09 |
| EPS pro forma | 4.38 | 5.08 | 5.55 | 6.04 |

Regulatory Approvals Required

The Merger cannot be completed unless Middlefield and Liberty obtain regulatory approval. The Merger consists of two separate mergers: first a merger of Middlefield's newly formed interim bank subsidiary into Liberty, followed immediately by the merger of Liberty into The Middlefield Banking Company. Accordingly, the Merger must be approved by the Office of the OCC, Liberty's principal federal regulator, and by the FDIC, The Middlefield Banking Company's principal federal regulator. The Ohio Division of Financial Institutions (ODFI) also has jurisdiction over

the Merger, which is a third required regulatory approval of the Merger itself. Declaration by Liberty of the special dividend before closing is an integral part of the transactions to be

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carried out under the Reorganization Agreement, but that special dividend cannot be paid unless Liberty first obtains OCC approval. Similarly, The Middlefield Banking Company and Middlefield must obtain ODFI approval of the approximately \$9.0 million dividend to be paid by The Middlefield Banking Company to Middlefield, which is one of Middlefield's sources of funds for the cash portion of the Merger consideration. The other source is borrowing of approximately \$12 million. Finally, Middlefield also must obtain approval from the ODFI for formation of the interim bank subsidiary and approval from the FDIC of deposit insurance for the interim bank subsidiary. All of these regulatory approvals are Merger closing conditions. By letter dated November 7, 2016 the OCC approved the merger application, subject to the condition that the merger be completed within six months. In an October 24, 2016 letter the OCC also approved Liberty Bank's \$3.0 million special dividend. By letter dated October 31, 2016 the FDIC also approved the merger application, also subject to the merger being completed within six months. In a separate October 31, 2016 letter the FDIC also approved the deposit insurance application of MBC Interim Bank, for the sole purpose of enabling MBC Interim Bank to merge into Liberty Bank. Middlefield anticipates that the ODFI will approve both the merger application and the special dividend payable by The Middlefield Banking Company, as well as formation of MBC Interim Bank.

Approval of a regulatory application merely implies satisfaction of regulatory criteria for approval, which does not include review of the adequacy or fairness of the Merger consideration to Liberty stockholders or Middlefield stockholders. Regulatory approvals do not constitute or imply any endorsement or recommendation of the Merger or the terms of the Reorganization Agreement.

Interests of Liberty's Directors and Certain Executive Officers in the Merger

Officers and directors of Liberty have employment and other compensation agreements or economic interests that give them interests in the Merger that are somewhat different from or in addition to their interests as Liberty stockholders. These interests and agreements include

two members of the Liberty board of directors will be appointed to Middlefield's board of directors. These directors are President and CEO William A. Valerian and Thomas W. Bevan,

all outstanding stock options awarded by Liberty will be cancelled in exchange for cash equal to (x) the positive difference between \$41.09 and the exercise price of the option, multiplied by (y) the number of shares of Liberty common stock acquirable by option exercise. There are also outstanding 2,000 phantom share awards made in 2013, including an award of 1,000 shares made on January 29, 2013 to President and CEO William A. Valerian's son, who also is an officer of Liberty. The phantom share awards consist of the right to a cash payment equal to the positive difference between Liberty's stock value on December 31, 2016 and the stock value on the award date, multiplied by the number of phantom shares awarded, with value being determined by Liberty's board of directors. The total cash payment for cancellation of the options and phantom awards is estimated to be \$161,931, of which \$62,986 is payable to Liberty's Chief Credit Officer, and \$15,200 is payable to the CEO's son. If Liberty option holders exercise stock options prior to the Merger closing, the resulting shares of Liberty stock will be converted into Merger consideration on the same terms as other outstanding Liberty stock instead of being cashed out as described in this paragraph.

Liberty's President and CEO William A. Valerian and Chief Operating Officer and CFO Richard C. Ebner have employment agreements with Liberty. The employment agreements provide that they are entitled to a

payment equal to 2.5 times salary when a change in control occurs, payable in equal installments over 30 months, plus a payment for the cost of life insurance, long-term disability, and medical benefits over those 30 months. The Merger will constitute a change in control under those employment agreements. Mr. Valerian's total payments are estimated to be \$929,502 and Mr. Ebner's are estimated to be \$716,900,

Certain Liberty officers will receive retention bonuses to remain with Liberty through consummation of the Merger,

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The Reorganization Agreement provides that Middlefield will consult with Liberty about forming a Northeast Ohio Advisory Board, which would include some of Liberty's current directors, and

the Reorganization Agreement preserves for six years the rights of Liberty's officers and directors to continued indemnification coverage and continued coverage under directors' and officers' liability insurance policies.

At Liberty's request, when Middlefield's board approved the Reorganization Agreement it also approved the potential issuance to Liberty CEO William A. Valerian and Liberty Director Thomas W. Bevan of Middlefield common stock in the Merger. This has the effect of exempting from the application of short-swing trading principles under section 16(b) of the Act their acquisition of Middlefield common stock in the Merger. Directors of an issuer that has equity securities registered under the Securities Exchange Act of 1934 are subject to short-swing trading restrictions. Messrs. Valerian and Bevan will be Middlefield directors after the Merger.

Each of Middlefield's and Liberty's board of directors was aware of these interests and considered them in approving the Reorganization Agreement and the transactions contemplated therein.

Material U.S. Federal Income Tax Consequences

The following summary reflects the opinion of Tucker Ellis LLP, legal counsel to Liberty, with respect to the material U.S. federal income tax consequences of the Merger to U.S. holders (as defined below) of Liberty common stock. The summary is based upon the Internal Revenue Code, applicable Treasury Regulations, judicial decisions and administrative rulings and practice, all as in effect as of the date hereof, and all of which are subject to change, possibly with retroactive effect. This summary does not address any tax consequences of the Merger under state, local or foreign laws, or any federal laws other than those pertaining to income tax.

For purposes of this discussion, the term "U.S. holder" means a beneficial owner that is: an individual citizen or resident of the United States; a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States or any of its political subdivisions; a trust that (1) is subject to the supervision of a court within the United States and the control of one or more U.S. persons or (2) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person; or an estate that is subject to U.S. federal income taxation on its income regardless of its source.

This discussion addresses only those U.S. holders of Liberty common stock that hold their Liberty common stock as a capital asset within the meaning of Section 1221 of the Internal Revenue Code and does not address all the U.S. federal income tax consequences that may be relevant to particular holders of Liberty common stock in light of their individual circumstances or to holders of Liberty common stock that are subject to special rules, such as non-U.S. holders (as defined below) (except to the extent discussed under the subheading "Tax Implications to Non-U.S. Stockholders" below); financial institutions; investors in pass-through entities; persons who are subject to alternative minimum tax; insurance companies; mutual funds; tax-exempt organizations; dealers in securities or currencies; traders in securities that elect to use a mark-to-market method of accounting; persons that hold Liberty common stock as part of a straddle, hedge, constructive sale or conversion or other integrated transaction; regulated investment companies; real estate investment trusts; persons whose functional currency is not the U.S. dollar; and holders who acquired their shares of Liberty common stock through the exercise of an employee stock option or otherwise as compensation.

If a partnership (or other entity that is taxed as a partnership for federal income tax purposes) holds Liberty common stock, the tax treatment of a partner in that partnership generally will depend upon the status of the partner and the

activities of the partnership. Partnerships and partners in partnerships should consult their own tax advisors about the tax consequences of the Merger to them.

Tucker Ellis LLP has delivered a legal opinion, dated September 26, 2016, and filed as an exhibit to the registration statement of which this joint proxy statement/prospectus is a part, to the effect that, subject to the

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exceptions, qualifications and limitations set forth therein, (i) the Merger will constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code, and (ii) Liberty and Middlefield will each be a party to such reorganization within the meaning of Section 368(a) of the Internal Revenue Code. Additionally, it is a condition to Liberty's obligation to complete the Merger that Liberty receive an opinion from Tucker Ellis LLP, dated the closing date of the Merger, to that effect. [This condition is waivable, and Middlefield and Liberty undertake to recirculate and resolicit if this condition is waived and the change in tax consequences is material.] This opinion is and will be based upon representation letters provided by Middlefield and Liberty and upon customary factual assumptions. Neither Middlefield nor Liberty has sought, and neither of them will seek, any ruling from the Internal Revenue Service regarding any matters relating to the Reorganization Agreement, and the opinion described above will not be binding on the Internal Revenue Service or any court. Consequently, there can be no assurance that the Internal Revenue Service will not assert, or that a court would not sustain, a position contrary to any of the conclusions set forth below. In addition, if any of the representations or assumptions upon which the opinion is based are inconsistent with the actual facts, the U.S. federal income tax consequences of the Merger could be adversely affected. The actual tax consequences to you of the Merger may be complex and will depend upon your specific situation and upon factors that are not within the control of Middlefield or Liberty. You should consult with your own tax advisor as to the tax consequences of the Merger in light of your particular circumstances, including the applicability and effect of the alternative minimum tax and any state, local or foreign and other tax laws.

The following discussion summarizes the material U.S. federal income tax consequences of the Merger to U.S. holders.

Tax Consequences of the Merger for U.S. holders of Liberty Common Stock. The U.S. federal income tax consequences of the Merger to a U.S. holder will depend on whether such U.S. holder receives cash, shares of Middlefield common stock or a combination of cash and stock in exchange for such U.S. holder's Liberty common stock. At the time a Liberty stockholder makes a cash or stock election pursuant to the terms of the Reorganization Agreement, such stockholder will not know whether, and to what extent, the proration provisions of the Reorganization Agreement will alter the mix of consideration such stockholder will receive. As a result, the tax consequences to such stockholder will not be ascertainable with certainty until such stockholder knows the precise amount of cash and shares of Middlefield common stock that such stockholder will receive pursuant to the Merger.

Exchange of Liberty common stock solely for Middlefield common stock. Except as discussed below, see *-Cash in Lieu of Fractional Shares of Middlefield Common Stock*, a U.S. holder that exchanges all of its shares of Liberty common stock solely for shares of Middlefield common stock pursuant to the Merger will not recognize gain or loss in connection with such exchange. A U.S. holder's aggregate tax basis in the Middlefield common stock received in the Merger in exchange for its Liberty common stock, including any fractional shares deemed received by the U.S. holder under the treatment discussed below in *-Cash in Lieu of Fractional Shares of Middlefield Common Stock*, generally will equal such U.S. holder's aggregate tax basis in the Liberty common stock surrendered by such U.S. holder in the Merger. The holding period for the shares of Middlefield common stock received by such U.S. holder in the Merger in exchange for its Liberty common stock, including any fractional shares deemed received by the U.S. holder under the treatment discussed below in *-Cash in Lieu of Fractional Shares of Middlefield Common Stock*, generally will include the holding period for the shares of Liberty common stock exchanged therefor.

Exchange of Liberty common stock solely for cash. A U.S. holder who exchanges all of its shares of Liberty common stock solely for cash pursuant to the Merger generally will recognize capital gain or loss equal to the difference between the amount of cash received by such U.S. holder and the U.S. holder's adjusted tax basis in the Liberty common stock exchanged therefor. Any capital gain or loss generally will be long-term capital gain or loss if the U.S. holder held the shares of Liberty common stock for more than one year at the effective time of the Merger.

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Exchange of Liberty common stock for a combination of Middlefield common stock and cash. Except as discussed below, a U.S. holder who exchanges its shares of Liberty common stock for a combination of Middlefield common stock and cash pursuant to the Merger will recognize gain (but not loss) equal to the lesser of (i) the excess, if any, of the amount of cash plus the fair market value of any Middlefield common stock received in the merger, over such U.S. holder's adjusted tax basis in the shares of Liberty common stock surrendered by such U.S. holder in the Merger and (ii) the amount of cash received by such U.S. holder in the Merger (other than cash received in lieu of fractional shares of Middlefield common stock).

For purposes of this calculation, the fair market value of Middlefield common stock is based on the trading price of that stock on the date of the Merger, rather than the methodology used in calculating the number of shares of Middlefield common stock to be issued to the stockholder. In the case of any U.S. holder who acquired different blocks of Liberty common stock at different times and at different prices, any realized gain or loss will be determined separately for each identifiable block of shares exchanged in the Merger. A loss realized on the exchange of one block of shares cannot be used to offset a gain realized on the exchange of another block of shares, but a U.S. holder will generally be able to reduce its capital gains by capital losses in determining its income tax liability. Prior to voting on the Merger, any U.S. holder potentially in that circumstance should consult its tax advisor with regard to identifying the basis or holding periods of the particular shares of Middlefield common stock received in the Merger. In addition, Treasury Regulations under Section 358 of the Internal Revenue Code provide that where a stockholder surrenders shares of target stock in an exchange and receives cash and shares of acquirer stock, then, to the extent the terms of the exchange specify that shares of acquirer stock or cash are received in exchange for a particular share of target stock surrendered, the terms of the exchange shall control for the purpose of determining the gain to the extent the terms of the exchange are economically reasonable. Therefore, a U.S. holder might be permitted to calculate the amount of taxable gain separately for each share of Liberty common stock surrendered in the Merger based on the specific consideration received for such share. This result might be permitted if the stockholder designates, on the election form (and as specifically authorized by the Reorganization Agreement), specific shares of Liberty common stock to be exchanged for cash or to be exchanged for Middlefield common stock, as the case may be. Such a designation might result in less taxable gain to a U.S. holder even if the holder holds a single block of Liberty common stock with a uniform tax basis. However, it is unclear whether a designation described in this paragraph will be treated as satisfying the requirements of the Treasury Regulations, and whether the proration provisions of the Merger agreement may affect such designation, and, therefore, there can be no assurance that the IRS would not successfully challenge a U.S. holder that reports taxable gain on the basis of such a designation. U.S. holders therefore should consult with their tax advisors with respect to the advisability, including any benefits or risks, of making an express designation in their election form.

Generally, a U.S. holder's aggregate tax basis in the Middlefield common stock received by that U.S. holder in the Merger in exchange for its Liberty common stock, including any fractional shares deemed received by the U.S. holder under the treatment discussed below in *-Cash in Lieu of Fractional Shares of Middlefield Common Stock*, will equal such U.S. holder's aggregate tax basis in the Liberty common stock surrendered in the Merger, increased by the amount of taxable gain (or dividend income as described in the following paragraph, but not the special dividend addressed below in *-Treatment of the Special Dividend*), if any, recognized by such U.S. holder in the Merger (other than with respect to cash received in lieu of fractional shares of Middlefield common stock), and decreased by the amount of cash, if any, received by such U.S. holder in the Merger (other than cash received in lieu of fractional shares of Middlefield common stock). The holding period for the shares of Middlefield common stock received in the Merger, including any fractional shares deemed received by the U.S. holder under the treatment discussed below in *-Cash in Lieu of Fractional Shares of Middlefield Common Stock*, generally will include the holding period for the shares of Liberty common stock exchanged therefor.

Any capital gain generally will be long-term capital gain if the U.S. holder held the shares of Liberty common stock for more than one year at the effective time of the Merger. The deductibility of capital losses is subject to limitations. All or part of the gain that a particular U.S. holder of Liberty recognizes could be treated as dividend income rather than capital gain if (i) such U.S. holder is a significant stockholder of Middlefield or (ii)

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such U.S. holder's percentage ownership, taking into account constructive ownership rules, in Middlefield after the Merger is not meaningfully reduced from what its percentage ownership would have been if it had received solely shares of Middlefield common stock rather than a combination of cash and shares of Middlefield common stock in the Merger. This could happen, for example, because of ownership of additional shares of Middlefield common stock by such holder, ownership of shares of Middlefield common stock by a person related to such holder or a share repurchase by Middlefield from other holders of Middlefield common stock. These rules are complex and dependent upon the specific factual circumstances particular to each U.S. holder. Consequently, each U.S. holder that may be subject to those rules should consult its tax advisor as to the application of these rules to the particular facts relevant to such U.S. holder.

Cash in Lieu of Fractional Shares of Middlefield Common Stock. A U.S. holder that receives cash instead of a fractional share of Middlefield common stock will be treated as having received the fractional share of Middlefield common stock pursuant to the Merger and then as having exchanged the fractional share of Middlefield common stock for cash in a redemption by Middlefield. In general, this deemed redemption will be treated as a sale or exchange, and a U.S. holder will recognize gain or loss equal to the difference between (i) the amount of cash received by such U.S. holder and (ii) the portion of the basis of the shares of Liberty common stock allocable to such fractional interest. Such gain or loss generally will constitute capital gain or loss and will be long-term capital gain or loss if the U.S. holder's holding period for the Liberty common stock exchanged by such U.S. Holder is greater than one year as of the effective time of the Merger.

Medicare Tax on Net Investment Income. A U.S. holder that is an individual is subject to a 3.8% tax on the lesser of (i) his or her net investment income for the relevant taxable year or (ii) the excess of his or her modified adjusted gross income for the taxable year over a certain threshold (between \$125,000 and \$250,000 depending on the individual's U.S. federal income tax filing status). A similar regime applies to estates and trusts. Net investment income generally would include any capital gain incurred in connection with the Merger, as well as the special dividend addressed below in *Treatment of the Special Dividend*.

Backup Withholding and Information Reporting. Payments of cash to a U.S. holder of Liberty common stock pursuant to the Merger may, under certain circumstances, be subject to information reporting and backup withholding (currently at a rate of 28%) unless the holder provides proof of an applicable exemption satisfactory to Middlefield and the exchange agent or, in the case of backup withholding, furnishes its taxpayer identification number and otherwise complies with all applicable requirements of the backup withholding rules. The documents provided to Liberty stockholders to surrender their stock certificates for exchange in the Merger will provide an opportunity for the Liberty stockholder to provide required information. Any amounts withheld from payments to a U.S. holder under the backup withholding rules are not additional tax and generally will be allowed as a refund or credit against the U.S. holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

A U.S. holder of Liberty common stock, as a result of having received Middlefield common stock in the Merger, will be required to retain records pertaining to the Merger. In addition, each U.S. holder of Liberty common stock that is a significant holder will be required to file a statement with that holder's U.S. federal income tax return in accordance with Treasury Regulations Section 1.368-3(b) setting forth that holder's basis in the Liberty common stock surrendered and the fair market value of the Middlefield common stock and cash received in the Merger. A significant holder is a holder of Liberty common stock that, immediately before the Merger, owned at least 5% of the vote or value of the outstanding stock of Liberty or securities of Liberty with a basis for federal income taxes of at least \$1 million.

Tax Implications to Non-U.S. Stockholders. For purposes of this discussion, the term non-U.S. holder means a beneficial owner of Liberty common stock (other than an entity treated as a partnership for U.S. federal income tax purposes) that is not a U.S. holder. The rules governing the U.S. federal income taxation of non-U.S. holders are

complex, and no attempt will be made herein to provide more than a limited summary of those rules. Any gain a non-U.S. holder recognizes from the exchange of Liberty common stock for Middlefield common

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stock and cash in the Merger generally will not be subject to U.S. federal income taxation unless (a) the gain is effectively connected with a trade or business conducted by the non-U.S. holder in the United States, or (b) in the case of a non- U.S. holder who is an individual, such stockholder is present in the United States for 183 days or more in the taxable year of the sale and other conditions are met. Non-U.S. holders described in (a) above will be subject to tax on gain recognized at applicable U.S. federal income tax rates and, in addition, non-U.S. holders that are corporations (or treated as corporations for U.S. federal income tax purposes) may be subject to a branch profits tax equal to 30% (or a lesser rate under an applicable income tax treaty) on their effectively connected earnings and profits for the taxable year, which would include such gain. Non-U.S. holders described in (b) above will be subject to a flat 30% tax on any gain recognized, which may be offset by U.S. source capital losses.

Treatment of the Special Dividend. The special dividend contemplated by the Reorganization Agreement is not part of the Merger consideration and is not addressed by the discussion of the Merger consideration set out above. The special dividend will be taxable to U.S. holders who are individuals as ordinary income, taxable at preferential rates applicable to qualified dividends; and, as discussed above in Medicare Tax on Net Investment Income, will be treated as net investment income for such purposes. Although the special dividend is not part of the Merger consideration for the purposes of the discussion above of the exchange of Liberty common stock in the Merger, the special dividend must be considered in determining whether the Merger qualifies as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. The potential amount of the special dividend has been calculated in a manner that enables Middlefield to acquire substantially all of the properties of Liberty within the meaning of Revenue Procedure 86-42, to be consistent with the treatment of the Merger as a reorganization as described in Section 368(a) of the Internal Revenue Code.

This discussion does not address tax consequences that may vary with, or are contingent upon, individual circumstances. Moreover, it does not address any non-income tax or any foreign, state or local tax consequences of the Merger. **Tax matters are very complicated, and the tax consequences of the Merger to you will depend upon the facts of your particular situation. Accordingly, we strongly urge you to consult with a tax advisor to determine the particular federal, state, local or foreign tax consequences of the Merger in light of your particular circumstances, including the applicability and effect of the alternative minimum tax and any state, local or foreign and other tax laws.**

Accounting Treatment

The Merger will be accounted for under the acquisition method of accounting in accordance with generally accepted accounting principles in the United States. Under the acquisition method of accounting, the assets and liabilities of Liberty will be recorded and assumed at estimated fair values when the Merger is consummated. The excess of the estimated fair value of Middlefield common stock issued and the cash proceeds paid over the net fair values of the assets acquired, including identifiable intangible assets, and liabilities assumed will be recorded as goodwill and will not be deductible for income tax purposes. Goodwill is subject to an annual test for impairment and the amount impaired, if any, is charged as an expense at the time of impairment.

Resale of Middlefield Common Stock

Middlefield registered with the SEC under the Securities Act of 1933 the issuance of common stock to Liberty stockholders in the Merger. No restrictions on the sale or other transfer of Middlefield common stock issued in the Merger will be imposed solely as a result of the Merger, except for restrictions on the transfer of Middlefield common stock issued to any Liberty stockholder who becomes an affiliate of Middlefield for purposes of SEC Rule 144. The term affiliate is defined in Rule 144 and generally includes a company's executive officers, directors, and stockholders beneficially owning 10% or more of the company's outstanding shares.

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THE REORGANIZATION AGREEMENT

Annex A is a complete copy of the Reorganization Agreement. *We encourage you to read the Reorganization Agreement carefully. It is the principal legal document governing the Merger.*

The Reorganization Agreement contains representations and warranties of Liberty and Middlefield. The assertions within those representations and warranties are qualified by information contained in confidential disclosure schedules the parties delivered to each other when they executed the Reorganization Agreement. In addition, some of the representations and warranties were made as of a specific date, may be subject to a contractual standard of materiality different from the standard of materiality generally applicable to statements made by a corporation to stockholders, or may have been used for purposes of allocating risk between the respective parties rather than establishing matters as facts. Accordingly, you should not rely on the representations and warranties as characterizations of the actual state of facts as of any specified date. We urge you to read the full text of the Reorganization Agreement carefully.

Effects of the Merger

When Liberty merges into The Middlefield Banking Company, The Middlefield Banking Company will be the surviving company. The separate corporate existence of Liberty will cease and the articles of incorporation and code of regulations of The Middlefield Banking Company in effect immediately before the Merger will be the articles of incorporation and code of regulations of the surviving company. The directors and officers of The Middlefield Banking Company immediately before the Merger will be the directors and officers of the surviving company. Liberty stockholders receiving cash Merger consideration only will not participate in Middlefield's future earnings and potential growth, but also will not bear the risk of loss for the surviving company's business or the risk of decreases in the value of that business. Liberty stockholders receiving Middlefield common stock as Merger consideration will participate in the surviving company's future earnings and potential growth through their ownership of stock, with all other rights associated with ownership of Middlefield common stock, such as the right to dividends and the right to vote at annual and special meetings.

Effective Time of the Merger

The Merger will occur on a date to be specified by Middlefield and Liberty within five days after all necessary closing conditions are satisfied unless otherwise agreed. The conditions include receipt of all stockholder approvals. The Merger will become effective as of the date specified in the certificate of Merger to be filed with the Ohio Secretary of State. As of the date of this joint proxy statement/prospectus, the parties expect that the Merger will be effective in the first quarter of 2017. However, Liberty and Middlefield cannot assure you that all necessary conditions to the Merger will be satisfied or when they will be satisfied.

If the Merger is not completed by May 30, 2017, the Reorganization Agreement may be terminated by Middlefield or by Liberty, unless the failure of the closing to occur by that date is due to the failure of the party seeking to terminate the Reorganization Agreement to perform or observe its covenants and agreements in the Reorganization Agreement. Either party may also terminate for uncured breaches of representations, warranties or covenants sufficient to cause a failure of a closing condition; for failure of the other party to obtain stockholder approval of the Merger; or in the event the Merger has not been completed by May 30, 2017. The parties may mutually agree to extend the May 30, 2017 deadline.

As part of the Merger transaction, MBC Interim Bank, a wholly owned interim bank subsidiary of Middlefield formed for the sole purpose of facilitating the Merger, will first merge into Liberty, with Liberty as the surviving company,

followed immediately by Liberty's merger into The Middlefield Banking Company.

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Merger Consideration

When the Merger is completed, Liberty stockholders will receive from Middlefield a combination of cash and Middlefield common stock. Subject to allocation procedures in the Reorganization Agreement ensuring that approximately 45% of the outstanding Liberty common stock is converted into the right to receive Middlefield common stock and the remaining outstanding Liberty common stock is converted into the right to receive cash, at the effective time of the Merger Liberty common stock not owned by Middlefield will be converted into the right to receive either:

\$37.96 in cash, or

1.1934 shares of Middlefield common stock

Liberty common stockholders may elect to receive cash, stock, or a mix of cash and stock, subject to adjustment such that 45% of the Liberty shares exchanged in the Merger are exchanged for Middlefield common stock.

It is not part of the Merger consideration, but the Reorganization Agreement also provides that Liberty will declare a special dividend to its stockholders before the Merger closing. The special dividend is currently estimated to be approximately \$3.0 million in the aggregate, or \$3.13 per share. Middlefield will not receive Merger consideration for its 23,218 Liberty shares but it will be entitled to the special dividend payment.

Liberty stockholders will own approximately 20% of the outstanding Middlefield common stock after the Merger.

Middlefield will not issue fractional shares. A holder of Liberty common stock who would otherwise be entitled to a fractional share (after taking into account all Liberty common stock owned by the holder at the effective time of the Merger) will instead receive cash, without interest, in an amount equal to the product of the fractional share to which the holder would otherwise be entitled multiplied by the volume-weighted average closing sale price of Middlefield common stock for the 30 trading days immediately before the effective time.

Once the Merger is complete, the Exchange Agent will mail to each holder of Liberty common stock transmittal materials and instructions for delivering share certificates to the Exchange Agent. American Stock Transfer & Trust Company, LLC will act as Exchange Agent. Liberty stockholders must use the letter of transmittal to exchange Liberty share certificates for Merger consideration. Do not send in share certificates with your proxy form.

Treatment of Liberty Stock Options

Liberty's compensation arrangements for officers and employees include equity-based awards, including stock options and phantom awards. There are option awards outstanding for 13,572 shares, all of which are vested. At the effective time of the Merger each outstanding and unexercised option to purchase Liberty common stock will be cancelled in exchange for a cash payment equal to (x) the positive difference, if any, between \$41.09 and the exercise price of the option, multiplied by (y) the number of shares of Liberty common stock acquirable by option exercise. There are also outstanding 2,000 phantom share awards made in 2013. The phantom share awards consist of the right to a cash payment equal to the positive difference between Liberty's stock value on December 31, 2016 and the stock value on the award date, multiplied by the number of phantom shares awarded, with value being determined by Liberty's board of directors. The total cash payment for cancellation of the options and phantom awards is estimated to be \$161,931. The \$41.09 figure is the sum of the \$37.96 per share cash Merger consideration and the \$3.13 per share

special dividend.

Covenants and Agreements

Covenants Affecting the Conduct of Business Until the Merger Occurs. The Reorganization Agreement requires Liberty to conduct its business in the ordinary course in the period before the Merger occurs and to

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reasonably preserve intact its assets and business organization. Liberty is required by the Reorganization Agreement to grant Middlefield access to Liberty properties and non-confidential books and records, making internal financial information available to Middlefield as well and keeping Middlefield informed regarding Liberty's operations as Middlefield may request. Liberty must keep Middlefield informed of material developments in its business or of any threatened litigation, meeting monthly with Middlefield personnel concerning Liberty's operations and providing monthly reports about problem assets. Liberty will cooperate with Middlefield regarding integration of data processing and related electronic information systems. Liberty also must maintain commercially reasonable business insurance. Liberty must notify Middlefield of any stockholder litigation arising out of the Reorganization Agreement, giving Middlefield the opportunity to participate at its own expense in the defense or settlement of the litigation.

If all necessary bank regulatory approvals and stockholder approvals of the Reorganization Agreement and Merger are obtained, Liberty will declare, upon receipt of OCC approval, a special dividend payable in cash to Liberty stockholders at or before Merger closing. The amount of the special dividend is estimated to be approximately \$3.0 million in the aggregate, or \$3.13 per share, but under section 6.1(b) of the Reorganization Agreement, the amount can increase based on Liberty's and Middlefield's tax advisers' mutual determination of the potential effect of the special dividend on the ability of Liberty's tax counsel to render an opinion at closing that the Merger qualifies as a tax-free reorganization under Internal Revenue Code section 368(a). The Reorganization Agreement requires in section 6.1(c) that Liberty maintain Tier 1 capital of at least \$28.3 million, after taking the special dividend into account but excluding the effect of identified expenses arising out of the Reorganization Agreement and Merger. For this purpose tier 1 capital is defined in OCC rules.

Liberty also agreed to a number of restrictions for the period until the Merger becomes effective, agreeing that without Middlefield's advance consent Liberty will not

(A) take any action that would prevent or impede the Mergers from qualifying as a reorganization under Section 368(a) of the Internal Revenue Code of 1986,

(B) change or waive any provision of Liberty's articles of association or bylaws,

(C) issue any shares of Liberty common stock or right to acquire Liberty common stock, split, combine, or reclassify any shares of capital stock, declare, set aside, or pay a dividend, or redeem or acquire any shares of capital stock, except for shares issued upon exercise of outstanding rights, except for regular cash dividends in amounts and with payment and record dates consistent with past practice (provided that declaration and payment of the final Liberty dividend before the Effective Time is coordinated with Middlefield Banc Corp. so that holders of Liberty common stock do not receive dividends on both Liberty common stock and Middlefield Banc Corp. common stock for the same period), and except for the special dividend payable under the terms of the Reorganization Agreement,

(D) enter into, amend, or terminate a contract or agreement involving payments exceeding \$25,000 over the life of the contract or agreement,

(E) apply to open a branch or automated teller facility or give notice of the intent to close a branch or automated teller facility,

(F) increase salary or wages, grant or agree to pay a bonus or severance or termination pay to, or enter into, renew, or amend an employment agreement, severance agreement, or supplemental executive agreement with, or increase the compensation or fringe benefits of, any director, officer, employee, or consultant except for (1) existing commitments, (2) bonuses, incentive payments, and salary adjustments in the ordinary course of business consistent with past practice, or (3) payments otherwise allowed by the Reorganization Agreement. Liberty will not hire or promote an

employee to a rank having a title of vice president or other more senior rank or hire a new employee at an annual rate of compensation exceeding \$40,000, but Liberty may hire at-will non-officer employees at an annual compensation rate not exceeding \$30,000 to fill vacancies arising in the ordinary course of business. Liberty may not hire a new employee without first seeking to fill the position internally,

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(G) enter into or modify a pension, retirement, stock purchase, stock appreciation right, stock grant, savings, profit sharing, deferred compensation, supplemental retirement, consulting, bonus, group insurance, or other employee benefit, incentive, or welfare contract, plan, or arrangement, or any trust agreement for any director, officer, or employee, or make a contribution to a defined contribution or defined benefit plan not in the ordinary course of business or not consistent with past practice,

(H) merge or consolidate, sell or lease all or a substantial portion of Liberty's assets or business, acquire all or a substantial portion of the business or assets of another entity other than in foreclosure, settlement in lieu of foreclosure, troubled loan or debt restructuring, or collection of a loan or credit arrangement, enter into a purchase and assumption transaction for deposits and liabilities, incur deposit liabilities other than liabilities incurred in the ordinary course of business consistent with past practice and consistent with prevailing competitive rates, permit the revocation or surrender by Liberty of its certificate of authority to maintain, or file an application for the relocation of, a branch office,

(I) except for transactions with the FHLB, subject an asset to a lien, pledge, security interest, or other encumbrance (excepting deposits, repurchase agreements, bankers acceptances, pledges in connection with acceptance of governmental deposits, transactions in federal funds, and satisfaction of legal requirements in the exercise of trust powers) other than in the ordinary course of business consistent with past practice, or incur indebtedness for borrowed money or guarantee indebtedness, except in the ordinary course of business consistent with past practice,

(J) change its method, practice, or principle of accounting, except as may be required from time to time by GAAP (without optional early adoption) or regulatory accounting principles,

(K) waive, release, grant, or transfer any rights of value or modify or change existing indebtedness other than in the ordinary course of business consistent with past practice,

(L) increase its investment securities portfolio above the amount in the fiscal year 2016 budget,

(M) purchase any securities except securities rated A or higher by either Standard & Poor's Ratings Services or Moody's Investors Service and having a duration of three years or less,

(N) except for existing unexpired commitments (other than unused portions of lines of credit) and except for the renewal of existing lines of credit, (x) make or acquire a new loan or other credit facility commitment (including loan participation, line of credit, or letter of credit) exceeding \$1.5 million or (y) make or acquire a new loan or other credit facility commitment (including loan participation, line of credit, or letter of credit) in an amount that would result in a lending relationship to a borrower or an affiliated group of borrowers exceeding \$1.5 million; but the proposed actions specified in (x) and (y) are permissible if Liberty gives written notice to Middlefield 48 hours in advance,

(O) enter into, renew, extend, or modify any other transaction (other than a deposit transaction) with a Liberty affiliate,

(P) enter into a futures contract, option, interest rate cap, interest rate floor, interest rate exchange agreement, or other agreement or take any other action for purposes of hedging the exposure of its interest-earning assets and interest-bearing liabilities to changes in market rates of interest,

(Q) take any action that would create on the part of any individual a right to payment under the terms of an employment agreement, except for rights arising on account of this Reorganization Agreement,

(R) except as may be required by changes in applicable law or regulations, GAAP, regulatory accounting principles, or by a bank regulatory agency, make any change in policies in force regarding extension of credit or establishment of reserves for possible losses or charge-off of losses, investments, asset/liability management, or other banking policies,

(S) take any action that would accelerate the right to payment on the part of any individual under a Liberty benefit plan, except for acceleration occurring on account of this Reorganization Agreement,

(T) make capital expenditures exceeding \$50,000 individually or \$80,000 in the aggregate, other than for existing binding commitments,

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(U) purchase or otherwise acquire or sell or otherwise dispose of any assets or incur any liabilities other than in the ordinary course of business consistent with past practices and policies,

(V) except for existing commitments to sell a participation interest in a loan, sell a participation interest in a loan, other than sales of loans secured by one-to-four-family real estate consistent with past practice, without giving Middlefield the first opportunity and a reasonable time to purchase the participation being sold, or purchase a participation interest in a loan other than purchases of participation interests from Middlefield,

(W) except in the ordinary course of providing credit to customers as part of its banking business, undertake or enter into a lease, contract, or other commitment involving payment by Liberty of more than \$35,000 annually or containing a financial commitment extending beyond 12 months from the date of the Reorganization Agreement,

(X) except in the ordinary course of business consistent with past practice and involving solely money damages of up to \$40,000 individually or \$100,000 in the aggregate and that does not create adverse precedent for other pending or potential claims, actions, litigation, arbitration or proceedings, pay, discharge, settle, or compromise a claim, action, litigation, arbitration, or proceeding,

(Y) foreclose upon or take a deed or title to any commercial real estate without having a Phase I environmental assessment of the property conducted as of a reasonably current date and, if the Phase I environmental assessment of the property reveals the presence of Materials of Environmental Concern, providing notice to Middlefield before the final sale,

(Z) purchase or sell a mortgage loan servicing right other than in the ordinary course of business consistent with past practice,

(AA) make, renew, or modify any loan, loan commitment, or other extension of credit if the loan, loan commitment, or other extension of credit is (x) contractually past due 90 days or more in the payment of principal or interest, or (y) on nonaccrual status, or (z) as of June 30, 2016 classified as Other Loans Specially Mentioned, Special Mention, Substandard, Doubtful, Loss, Classified, Criticized, or Watch list,

(BB) except as required by law or for communications in the ordinary course of business consistent with past practice and not relating to the Mergers or other transactions under this Agreement, issue a broadly distributed communication of a general nature to employees (including general communications relating to benefits and compensation) without first consulting with Middlefield and, if the communication has to do with post-Merger employment or benefit or compensation information, without first obtaining Middlefield's consent, or issue a broadly distributed communication of a general nature to customers without first obtaining Middlefield's approval,

(CC) make, change, or rescind a material election concerning taxes or tax returns, file an amended tax return, enter into a closing agreement regarding taxes, settle or compromise a material tax claim or assessment, or surrender a right to claim a refund of taxes or obtain a tax ruling, or

(DD) take any action that would (1) materially adversely affect the ability of the parties to obtain regulatory approval of the Merger or materially increase the time necessary to obtain regulatory approval, (2) materially adversely affect Liberty's ability to perform its Reorganization Agreement covenants, or (3) result in a Liberty representation and warranty not being true and correct or result in any of the closing conditions not being satisfied.

Middlefield has also agreed to a limited set of restrictions on its business in the period before the Merger is completed. Specifically, Middlefield has agreed that in the period before the Merger is completed it and The Middlefield Banking

Company will conduct business in the usual and ordinary course, will maintain commercially reasonable business insurance, and will not take any action that

changes or waives a provision of its articles of incorporation or code of regulations in a way that is adverse to Liberty stockholders,

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materially adversely affects the ability of the parties to obtain regulatory approval of the Merger or increases the time necessary to obtain approvals, or Middlefield's or The Middlefield Banking Company's ability to perform its Reorganization Agreement obligations, or results in a condition to closing not being satisfied, or

prevents the Merger from qualifying as a tax-free reorganization under Internal Revenue Code section 368(a) Middlefield must deposit with the Exchange Agent before Merger closing cash and Middlefield common stock sufficient to pay the Merger consideration to Liberty stockholders. Until the Merger occurs Middlefield may not issue additional shares of common stock or rights to acquire stock except under Middlefield's equity-based benefit plans or under Middlefield's dividend reinvestment plan. Middlefield also is required to grant Liberty access to Middlefield properties and non-confidential books and records, making internal financial information available to Liberty as well. Middlefield is also obligated to maintain insurance, supplement its disclosures to Liberty, and seek consents necessary for closing.

Nasdaq Listing. Middlefield will cause the Middlefield common stock being issued in the Merger to be authorized for listing on Nasdaq, subject to official notice of issuance, before the Merger becomes effective.

Middlefield Board of Directors. Following the Merger, the Board of Directors of Middlefield will cause two current members of the Board of Directors of Liberty, William A. Valerian and Thomas W. Bevan, to be appointed to the Board of Directors of Middlefield.

Employee Matters. Liberty employees who become employees of Middlefield or The Middlefield Banking Company when the Merger is completed will participate in employee benefit plans of general applicability to the same extent as similarly-situated employees of Middlefield and The Middlefield Banking Company, and for vesting and eligibility purposes the former Liberty employees will be credited for their service as Liberty employees. Middlefield and The Middlefield Banking Company are not contractually committed to retaining Liberty employees but have agreed to retain as many Liberty officers and employees as is commercially reasonable and possible, agreeing also to consider Liberty personnel for any positions becoming open at Middlefield or The Middlefield Banking Company after the date of the Reorganization Agreement. Middlefield will honor employment, change-in-control severance, and split dollar insurance agreements of Liberty, but is not required to pay and will not pay any benefits that would constitute parachute payments under Internal Revenue Code sections 280G and 4999. Those provisions of the Internal Revenue Code impose a 20% excise tax on parachute payments in a change in control, denying to the employer a compensation deduction for the benefits constituting parachute payments. For Liberty employees whose service does not continue after the Merger or who are terminated without cause within one year after the Merger, Middlefield has agreed in the Reorganization Agreement to pay them cash severance equal to one week of base pay for each year of service, with a minimum of four weeks of base pay and a maximum of 26, and to make available career counseling and professional counseling. Middlefield also may pay retention or incentive bonuses to selected Liberty personnel whose service is critical to the Merger-related transition, such as data processing personnel.

Indemnification and Directors' and Officers' Insurance. For a period ending six years after the effective time of the Merger, Middlefield will indemnify and hold harmless, to the fullest extent provided under Liberty's articles of association and bylaws, each present and former director and officer of Liberty and its subsidiaries from liabilities arising out of or pertaining to matters existing or occurring at or before the effective time of the Merger, including the transactions under the Reorganization Agreement. Middlefield has also agreed that for a period of six years after the Merger Middlefield will maintain directors' and officers' liability insurance coverage for actions, omissions, or events occurring before the effective time of the Merger, including the transactions under the Reorganization Agreement, and covering Liberty directors and officers on the July 28, 2016 date of the Reorganization Agreement. The insurance will be on terms and conditions substantially equivalent to Liberty's directors' and officers' liability insurance coverage, but

Middlefield is not required to incur annual premium expense greater than 150% of Liberty's annual premium cost as of July 28, 2016. Instead of Middlefield's

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continued maintenance of directors' and officers' liability insurance coverage, before the effective time of the Merger, Middlefield may purchase and pay for a tail policy for directors' and officers' liability insurance on the terms described in this paragraph, or Liberty may do so with Middlefield's consent.

Regulatory Matters. Middlefield agreed to promptly prepare and file with the SEC a registration statement on Form S-4, of which this joint proxy statement/prospectus is a part. Liberty prepared the portion of this joint proxy statement/prospectus constituting the proxy statement of Liberty. Middlefield and Liberty agreed to use commercially reasonable efforts to have the Form S-4 declared effective under the Securities Act of 1933 as promptly as practicable after such filing, and Middlefield and Liberty agreed to mail or deliver the joint proxy statement/prospectus to their respective stockholders. Middlefield also will use commercially reasonable efforts to obtain all necessary state securities law or "Blue Sky" permits and approvals required to complete the Merger. Middlefield and Liberty will cooperate with each other and use commercially reasonable efforts to promptly prepare and file all necessary documentation and obtain all permits, consents, approvals, and authorizations of all third parties and governmental entities that are necessary to complete the Merger. The Reorganization Agreement requires both Middlefield and Liberty to file for all necessary regulatory approvals. See "THE MERGER - Regulatory Approvals Required."

Stockholder Approval. Both Middlefield and Liberty are required by the Reorganization Agreement to call and hold a meeting of stockholders to enable stockholders to consider and vote on the Reorganization Agreement and the Merger. Liberty's board of directors also committed in the Reorganization Agreement to recommend that Liberty stockholders vote in favor of adopting and approving the Reorganization Agreement, committing also to ensure that any anti-takeover provisions of Liberty's articles of association, bylaws, or applicable state law are made inapplicable to the Merger or to minimize the impact of any applicable antitakeover provisions. The board is permitted by the Reorganization Agreement to decline to recommend a vote in favor or to withdraw, modify, or change the recommendation to stockholders if, after consultation with financial and legal advisors, the board concludes that recommending a vote in favor of adoption and approval or failing to withdraw, modify, or change the recommendation would breach the directors' fiduciary duties to stockholders.

No Solicitation. The Reorganization Agreement prohibits Liberty and its officers, directors, employees, representatives, affiliates, and agents from (x) initiating, soliciting, knowingly encouraging, or furnishing assistance or nonpublic information for an inquiry or the making of a proposal that constitutes or that may reasonably be expected to lead to an acquisition proposal, (y) discussing, negotiating, or making a proposal that constitutes or that may reasonably be expected to lead to an acquisition proposal, or (z) agreeing to or endorsing an acquisition proposal. For this purpose the term "acquisition proposal" means a proposal or offer (other than Middlefield's) involving Liberty for (1) merger, consolidation, share exchange, business combination, or other similar transactions, (2) sale, lease, exchange, mortgage, pledge, transfer, or other disposition of 25% or more of the assets of Liberty in a single transaction or series of transactions, or (3) a tender offer or exchange offer for 25% or more of the outstanding shares of Liberty common stock or the filing of a registration statement under the Securities Act of 1933 for the offer of shares in exchange for Liberty stock. Acquisition proposal also includes a publicly announced proposal, plan, or intention to do any of the foregoing or any agreement to engage in any of the foregoing. Liberty would not violate this obligation, however, if it furnishes information to and negotiates with a person making an acquisition proposal if two conditions are satisfied: (1) the acquisition proposal is not solicited by Liberty and (2) Liberty's board concludes in good faith, after consulting with legal and financial advisors, that the unsolicited acquisition proposal is reasonably likely to result in a transaction more favorable to Liberty stockholders from a financial point of view than the Merger transaction under the Reorganization Agreement. A proposal satisfying both of those conditions is referred to as a "Superior Proposal." Liberty must notify Middlefield within two business days after receiving inquiries, proposals, offers, or information requests.

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Representations and Warranties

Liberty's representations and warranties to Middlefield in the Reorganization Agreement concern the following topics and are qualified by the confidential disclosure schedules delivered to Middlefield:

corporate organization, good standing, corporate power, qualification to do business, and capitalization

authority to enter into the Reorganization Agreement and complete the Merger

absence of conflicts with governing documents, applicable laws, or contractual arrangements as a result of entering into the Reorganization Agreement or completing the Merger

required regulatory and third party consents necessary for the Merger

conformity with GAAP of Liberty's financial statements and absence of undisclosed liabilities

compliance with tax reporting obligations and payment of taxes

absence of material events or circumstances since December 31, 2015 that have had or reasonably would be expected to have a material adverse effect on Liberty

absence of material contractual arrangements restricting Liberty's business

absence of defaults under material contracts

absence of transactions outside the ordinary course of business since December 31, 2015

quality of Liberty's ownership interest in properties used in its business

maintenance by Liberty of adequate insurance for the conduct of its business

absence of legal proceedings against Liberty or affecting Liberty's assets, or challenging the Reorganization Agreement or the Merger or adversely affecting Liberty's ability to complete the Merger

Liberty's compliance with law generally, including but not limited to laws particularly affecting banking organizations

compliance by Liberty with laws affecting employee benefits

broker's and finder's fees related to the Merger payable by Liberty

compliance with applicable environmental laws

quality of Liberty's loan portfolio and adequacy of the allowance for loan losses

absence of insider or affiliate transactions on preferential terms

absence of deposits treated under FDIC rules as brokered deposits

approval of the Reorganization Agreement by the board of directors

legal status of risk management securities such as swaps, options, forward contracts and similar arrangements

receipt by Liberty of a fairness opinion from Liberty's financial advisor, Boenning

legal right to intellectual property

absence of labor disputes

absence of any material misstatements or omissions

quality of Liberty's internal controls over financial reporting

status of Liberty's insurance on the lives of officers or directors

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Middlefield's representations and warranties to Liberty in the Reorganization Agreement concern the following topics and are qualified by the confidential disclosure schedules delivered to Liberty:

corporate organization, good standing, corporate power, qualification to do business, and capitalization

authority to enter into the Reorganization Agreement and complete the Merger

absence of conflicts with governing documents, applicable laws, or contractual arrangements as a result of entering into the Reorganization Agreement or completing the Merger

required regulatory and third party consents necessary for the Merger

conformity with GAAP and SEC requirements of Middlefield's financial statements filed with the SEC and absence of undisclosed liabilities

compliance with tax reporting obligations and payment of taxes

absence of material events or circumstances since December 31, 2015 that have had or would be expected to have a material adverse effect on Middlefield

absence of material contractual arrangements restricting Middlefield's or The Middlefield Banking Company's business

absence of defaults under material contracts

absence of material asset acquisitions or dispositions since December 31, 2015

quality of Middlefield's ownership interest in properties used in its business

maintenance by Middlefield of adequate insurance for the conduct of its business

absence of legal proceedings against Middlefield or affecting Middlefield's assets, or challenging the Reorganization Agreement or the Merger or adversely affecting Middlefield's ability to complete the Merger

Middlefield's compliance with law generally, including but not limited to laws particularly affecting banking organizations

compliance by Middlefield with laws affecting employee benefits

broker's and finder's fees related to the Merger payable by Middlefield

compliance with applicable environmental laws

quality of The Middlefield Banking Company's loan portfolio and adequacy of the allowance for loan losses

absence of insider or affiliate transactions on preferential terms

approval of the Reorganization Agreement by the board of directors

legal status of risk management securities such as swaps, options, forward contracts and similar arrangements

legal right to intellectual property

absence of claims against The Middlefield Banking Company based on fiduciary duties

absence of labor disputes

absence of any material misstatements or omissions

quality of Middlefield's internal controls over financial reporting

authorization and validity of the shares of Middlefield common stock to be issued in the Merger to Liberty stockholders

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compliance by Middlefield with its SEC reporting obligations

receipt by Middlefield of a fairness opinion from Middlefield's financial advisor, Donnelly Penman & Partners, Inc.

Many of the representations and warranties of Liberty and Middlefield are qualified regarding materiality or material adverse effect. For purposes of the Reorganization Agreement, a material adverse effect means an effect that is material and adverse to the financial condition, results of operations, or business of Middlefield and its subsidiaries taken as a whole, or of Liberty and its subsidiaries taken as a whole, or materially impairs the ability of either Liberty, on one hand, or Middlefield and The Middlefield Banking Company, on the other hand, to perform the obligations under the Reorganization Agreement or otherwise materially impedes consummation of the Merger, except that the following circumstances or events are excluded when determining whether a material adverse effect has occurred:

- (1) the impact of (x) changes in laws, rules, or regulations affecting banks or their holding companies generally, or interpretations thereof by courts or governmental agencies, (y) changes in GAAP, or (z) changes in regulatory accounting requirements, in any case applicable to financial institutions or their holding companies generally and not specifically relating to Liberty, on one hand, or Middlefield or any Middlefield subsidiary, on the other hand,
- (2) announcement of the Reorganization Agreement by press release mutually agreed to by Liberty and Middlefield or by Form 8-K filed by Middlefield,
- (3) any act or omission of Liberty required under the Reorganization Agreement or taken or omitted to be taken with the express written permission of Middlefield,
- (4) any act or omission of Middlefield or The Middlefield Banking Company required under the Reorganization Agreement or taken or omitted to be taken with the express written permission of Liberty,
- (5) the direct effects of compliance with the Reorganization Agreement on the operating performance of the parties, including expenses incurred by the parties investigating, negotiating, documenting, effecting, and consummating the transactions under the Reorganization Agreement,
- (6) any changes after the date of the Reorganization Agreement in general economic or capital market conditions affecting banks or their holding companies generally, and
- (7) any changes in national or international political or social conditions, including engagement by the United States in hostilities, whether by the declaration of a national emergency or war, or the occurrence of a military attack upon or within the United States.

The representations and warranties in the Reorganization Agreement do not survive the effective time of the Merger and, as described below under Termination, if the Reorganization Agreement is terminated there will be no liability under the representations and warranties of the parties or otherwise under the Reorganization Agreement unless a party knowingly breached the Reorganization Agreement.

The Reorganization Agreement representations and warranties of Middlefield and Liberty were made solely for purposes of that agreement and as of specific dates. The representations, warranties, and covenants in the Reorganization Agreement may be subject to limitations agreed upon by the contracting parties, including being qualified by confidential disclosures made for the purposes of allocating contractual risk between the parties to the Reorganization Agreement instead of establishing matters as facts, and may be subject to standards of materiality

applicable to the contracting parties that differ from those generally applicable to investors. When reviewing the representations, warranties, and covenants contained in the Reorganization Agreement or summarized in this joint proxy statement/prospectus, it is important to bear in mind that the representations, warranties, and covenants and the summary are not intended by the parties to the Reorganization Agreement to be characterizations of the actual state of facts or condition of Middlefield, Liberty, or any of their respective subsidiaries or affiliates. Moreover, information concerning the subject matter of the representations, warranties,

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and covenants may have changed after the date of the Reorganization Agreement. For the foregoing reasons, the representations, warranties, and covenants or any summary of those provisions should not be read alone and should instead be read in conjunction with the other information contained in the reports, statements, and filings that Middlefield publicly files with the SEC. For more information regarding these documents, see the section entitled *Where You Can Find More Information* in the forepart of this document.

Conditions to the Merger

Conditions to Each Party's Obligations. The obligations of Middlefield and Liberty to complete the Merger are subject to satisfaction of the following conditions:

adoption and approval of the Reorganization Agreement and the Merger by Liberty stockholders and by Middlefield stockholders,

absence of an order or injunction against consummation of the Merger,

receipt of all necessary regulatory approvals and expiration of any required waiting period, and absence of regulatory approval conditions that would have a material adverse effect on Middlefield or Liberty,

effectiveness of the Form S-4 registration statement of which this joint proxy statement/prospectus is a part, and the absence of a stop order or proceeding initiated or threatened by the SEC for that purpose, and

authorization for Nasdaq listing of the Middlefield common stock to be issued in the Merger.

Conditions to Middlefield's Obligations. Middlefield's obligation to complete the Merger is subject to satisfaction of these additional conditions:

accuracy of Liberty's representations and warranties in the Reorganization Agreement as of the date of the Reorganization Agreement and as of effective time of the Merger (other than representations and warranties that by their terms are made specifically as of the date of the Reorganization Agreement or another date), subject to applicable materiality qualifiers,

performance by Liberty in all material respects of its obligations under the Reorganization Agreement,

absence of an event or circumstance after the date of the Reorganization Agreement having a material adverse effect on Liberty's financial condition, results of operations, or business,

absence of regulatory approval conditions that would have a material adverse effect on Middlefield, and

the landlord of Liberty's Twinsburg location consents to The Middlefield Banking Company succeeding to Liberty's interest as tenant.

Conditions to Liberty's Obligations. Liberty's obligation to complete the Merger is subject to satisfaction of these additional conditions:

accuracy of Middlefield's and The Middlefield Banking Company's representations and warranties in the Reorganization Agreement as of the date of the Reorganization Agreement and as of effective time of the Merger (other than representations and warranties that by their terms are made specifically as of the date of the Reorganization Agreement or another date), subject to applicable materiality qualifiers,

performance by Middlefield and The Middlefield Banking Company in all material respects of their obligations under the Reorganization Agreement,

absence of an event or circumstance after the date of the Reorganization Agreement having a material adverse effect on Middlefield's or The Middlefield Banking Company's financial condition, results of operations, or business,

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receipt by Liberty of a legal opinion dated the closing date, stating that the Merger will qualify as a reorganization under Internal Revenue Code section 368(a),

deposit by Middlefield of the Merger consideration with the Exchange Agent, and

the landlord of Liberty's Twinsburg location consenting to The Middlefield Banking Company succeeding to Liberty's interest as tenant.

Termination; Termination Fee

The Reorganization Agreement may be terminated before the effective time of the Merger, whether before or after approval by Liberty stockholders and Middlefield stockholders:

by mutual written consent of Middlefield and Liberty,

by either Middlefield or Liberty if the other party breaches its covenants or representations and warranties and the breach is not cured within 30 days after written notice, or if by its nature the breach cannot be cured, provided the terminating party is not also in breach of its covenants or representations and warranties,

by either Middlefield or Liberty if the Merger does not occur by May 30, 2017 (or a later date the parties may agree to), unless the failure to close by that date is the result of the terminating party's breach of covenants or representations and warranties in the Reorganization Agreement,

by Middlefield if the Liberty stockholders do not vote to approve the Reorganization Agreement,

by Liberty if the Middlefield stockholders do not vote to approve the Reorganization Agreement,

by either party if a required governmental approval is denied by final, non-appealable action, or if a governmental entity issues a final, non-appealable order, injunction, or ruling enjoining or otherwise prohibiting,

by Middlefield if Liberty becomes subject to a formal bank regulatory enforcement action,

by Middlefield if Liberty's board fails to recommend to Liberty stockholders adoption and approval of the Reorganization Agreement or withdraws or adversely changes the recommendation in favor of the Reorganization Agreement, or if Liberty accepts a competing acquisition proposal,

by Liberty if it accepts a superior acquisition proposal, but Liberty's termination right is conditioned on Liberty giving to Middlefield notice of the superior proposal and the opportunity to modify Middlefield's merger proposal.

Liberty must pay a termination fee of \$1.65 million to Middlefield if Middlefield terminates the Reorganization Agreement because Liberty's board fails to recommend to Liberty stockholders adoption and approval of the Reorganization Agreement, or because Liberty's board withdraws or adversely changes the recommendation in favor of the Reorganization Agreement, or because Liberty accepts a competing acquisition proposal. Liberty would also be required to pay the \$1.65 million termination fee to Middlefield if Liberty terminates the Reorganization Agreement because it accepts a superior acquisition proposal. Finally, if a competing acquisition proposal is made to Liberty and thereafter Middlefield terminates the Reorganization Agreement because of a breach by Liberty or Middlefield or Liberty thereafter terminates the agreement because Liberty stockholders do not adopt and approve the Reorganization Agreement and Merger, Liberty will have to pay the \$1.65 million termination fee to Middlefield if within one year after termination Liberty enters into a definitive agreement for a competing acquisition proposal.

Effect of Termination

If the Reorganization Agreement terminates, it will be deemed void, without any liability on the part of any of the parties, except in the case of a party's willful breach of the Reorganization Agreement, and except for a

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potential termination fee payment by Liberty. Reorganization Agreement provisions for confidentiality of the parties information, the termination fee, and other technical provisions would remain effective despite termination of the Reorganization Agreement.

Amendments, Extensions and Waivers

Liberty and Middlefield may amend the Reorganization Agreement by action of their boards of directors, whether before or after stockholder approval of the Reorganization Agreement. If the amendment decreases the amount or value of Merger consideration or the form of the Merger consideration additional approval of Liberty stockholders would be necessary. At any time before effective time of the Merger a party may extend the time for performance of the other party's obligations, waive inaccuracies in the other party's representations and warranties, or waive compliance with agreements or conditions in the Reorganization Agreement.

Stock Market Listing

Middlefield common stock is listed on Nasdaq, trading under the symbol MBCN. Middlefield will apply to Nasdaq to list the additional common stock being issued in the Merger. It is a condition to both parties' obligation to complete the Merger that Nasdaq approve Middlefield's application, subject to official notice of issuance.

Fees and Expenses

Fees and expenses incurred by a party regarding the Merger, the Reorganization Agreement, and the transactions under the Reorganization Agreement will be paid by the party incurring the fees and expenses, regardless of whether the Merger is completed, but if the Reorganization Agreement is terminated because of a party's willful and material breach, the breaching party is liable for damages and all costs and expenses.

Table of Contents**COMPARISON OF LIBERTY AND MIDDLEFIELD STOCKHOLDER RIGHTS**

The rights of Liberty stockholders who receive Middlefield common stock in the Merger will be governed by the Ohio General Corporation Law (OGCL) and by Middlefield's Second Amended and Restated Articles of Incorporation and Code of Regulations. Their stockholder rights currently are determined by Liberty's Amended and Restated Articles of Association and its By-Laws. Federal law authorizing national banking associations permits national banks to select the state law that will control corporate governance questions not specifically treated in the articles of association and bylaws. Liberty's By-Laws state that the OGCL apply.

Although the rights of Middlefield stockholders and the rights of Liberty stockholders are similar, there are some differences between provisions of the Second Amended and Restated Articles of Incorporation of Middlefield and the Amended and Restated Articles of Association of Liberty, and differences between provisions of the Amended Code of Regulations of Middlefield and the By-Laws of Liberty. The following comparison of stockholder rights is not a complete description of all differences individual Liberty stockholders might consider important. The comparison is qualified in its entirety by reference to the OGCL and the governing corporate documents of Liberty and Middlefield.

| | Liberty Bank, N.A. | Middlefield Banc Corp. |
|--|--|--|
| authorized capital | Liberty's authorized capital stock consists of 2,500,000 shares of common stock, par value \$10.00 per share; amendment of Liberty's articles of association to increase authorized capital would require advance approval both of stockholders and of the OCC | Middlefield's authorized capital consists of 10,000,000 shares of common stock, without par value; amendment of Middlefield's articles of incorporation to increase authorized capital would require advance approval of stockholders only; bank regulatory approval is not necessary |
| preemptive rights (the right of stockholders to purchase shares to maintain their percentage ownership interest before a corporation may sell shares to the public) | Liberty stockholders do not have preemptive rights | Middlefield stockholders do not have preemptive rights |
| issuer stock repurchases | a national banking association generally must obtain advance approval of the OCC to repurchase shares, along with approval of two thirds of the shares outstanding | neither the OGCL nor Middlefield's governing documents require advance regulatory approval and advance stockholder approval generally are not necessary for Middlefield to repurchase shares, but approval of the Federal Reserve potentially can be required in exceptional circumstances |
| dividends | | |

stockholders are entitled to dividends when, as, and if declared by the board of directors, provided that such dividends are made in compliance with national banking law; OCC approval may be required in limited cases

stockholders are entitled to dividends when, as, and if declared by the board of directors, provided that such dividends are made in compliance with the OGCL

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| | Liberty Bank, N.A. | Middlefield Banc Corp. |
|--|--|---|
| amendment of governing documents (articles of incorporation or association and code of regulations or by-laws) | amendment of the articles of association requires approval of a majority of the outstanding shares | amendment of Middlefield's articles of incorporation requires approval of a majority of the outstanding shares, but a two-thirds supermajority is necessary to amend the business combination provisions of Article Sixth |
| | Liberty's by-laws may be altered, amended or repealed by a majority of the board of directors of Liberty or by the holders of at least a majority of the voting power of the outstanding voting shares of Liberty | amendment of Middlefield's regulations requires approval of two-thirds of the outstanding shares, but a majority of the outstanding shares may amend the regulations if the amendment is first approved by a disinterested board majority |
| number of directors | a national banking association's board of directors must consist of at least five but no more than 25 directors; within that range the board, subject to certain limitations, may increase its size without stockholder approval | Middlefield's board size is not limited by law, but Middlefield's regulations state that the authorized number of directors is a minimum of five and a maximum of 25; within that range the board may increase its size without stockholder approval |
| director terms | each elected director is elected for a term ending on the date of the following annual meeting of stockholders | directors serve staggered three-year terms, with the size of each of the three classes being as nearly equal as possible |
| director qualification and stock ownership | a majority of directors must be residents of Ohio or residents within a 100-mile radius of Liberty's main office; each director must own Liberty stock with a market value of at least \$1,000 | Middlefield's governing documents do not impose a residency requirement or a stock ownership requirement, but Middlefield's Corporate Governance Guidelines state that within three years after election a director should own Middlefield common stock with a value of at least two times the director's annual base compensation for service as a director of The Middlefield Banking Company, and three times compensation within six years after election |

election of directors

directors are elected by plurality
vote

directors are elected by plurality
vote; directors can be elected at
annual meetings only

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| | Liberty Bank, N.A. | Middlefield Banc Corp. |
|---|--|--|
| removal of directors | a director may be removed by the vote of a majority of the outstanding shares, subject to certain limitations | a director may be removed solely for cause by the vote of a majority of the outstanding shares |
| nomination of directors by stockholders | a stockholder seeking to nominate a director for election must submit the nomination to the Secretary of Liberty and the OCC not less than 14 days nor more than 50 days prior to the election meeting; provided, however, that if less than 21 days notice of the election meeting is given to stockholders, the nomination shall be mailed or delivered to the Secretary and the OCC not later than the 7th day following the day on which the notice was given | a stockholder seeking to nominate a director for election must submit detailed information specified in Article III, section 4 of Middlefield's regulations, submitting the information during a 60-day period ending approximately 60 days before the proxy soliciting materials are mailed to stockholders |
| calling special meetings of stockholders | special meetings of stockholders may be called by the chairman of the board, the president, a vice president, or the board of directors; holders of record of 25% or more of the outstanding shares may call a special meeting if the meeting does not involve amendment of the articles of association or a change in control; holders of record of a majority of the outstanding shares may call a special meeting involving amendment of the articles of association or a change in control | special meetings of stockholders may be called by the board of directors, by the Chairman or President, or by holders of 25% or more of the outstanding shares |
| quorum for stockholder meetings | a quorum exists at a meeting if holders of a majority of the outstanding shares are represented | a quorum exists at a meeting if holders of a majority of the outstanding shares are represented |
| action of stockholders | at a meeting at which a quorum exists, on proposals other than election of directors the affirmative vote of a majority of the shares present and entitled to vote is sufficient to constitute action by stockholders, unless the National Bank Act and OCC regulations or Liberty's governing documents | at a meeting at which a quorum exists, on proposals other than election of directors approval of a majority of the votes cast, excluding abstentions, is sufficient to constitute action by stockholders, unless the OGCL or Middlefield's governing documents impose a greater |

impose a greater percentage
approval requirement

percentage approval requirement

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| | | |
|---|--|--|
| merger approval | <p>Liberty Bank, N.A. under the National Bank Act, the merger of a national banking association requires approval of at least two thirds of outstanding shares, in addition to federal bank regulatory approval</p> | <p>Middlefield Banc Corp. in addition to bank regulatory approval required under federal law and Ohio law, the OGCL generally requires approval of two thirds of outstanding shares for approval of a merger; the OGCL allows a corporation's articles of incorporation to impose the lower threshold of a mere majority, but Middlefield's articles of incorporation do not allow approval of mergers by majority vote</p> |
| <p>cumulative voting for directors (multiplying each stockholder's voting power by the number of directors standing for election and allowing stockholders to allocate all of their votes to one or more of the directors)</p> | <p>Liberty's governing documents do not authorize cumulative voting</p> | <p>cumulative voting is not permitted</p> |
| <p>stockholder proposals for business to be conducted at a meeting</p> | <p>Liberty's governing documents do not state procedures for proposal by stockholders of business to be acted upon at a meeting</p> | <p>a stockholder seeking to propose business for action by stockholders at a meeting must submit detailed information specified in Article I, section 8 of Middlefield's regulations, submitting the information during a 60-day period ending approximately 60 days before the proxy soliciting materials are mailed to stockholders; stockholders also have the right under SEC Rule 14a-8 to submit proposals for inclusion in Middlefield's annual meeting proxy statement</p> |
| <p>provisions specifically governing changes in control</p> | <p>Liberty's governing documents contain no change-in-control provisions</p> | <p>Article Sixth of Middlefield's Second Amended and Restated Articles of Incorporation requires disinterested majority approval for any business combination transaction involving a holder of 10% or more of Middlefield's stock</p> |

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Middlefield Directors. According to article III, section 2, of Middlefield's regulations, the board may consist of no fewer than five and no more than 25 directors, the precise number being fixed or changed from time to time within that range by the board or by majority vote of shareholders acting at an annual meeting. Article III, section 2(b) of Middlefield's regulations provides that if the number of directors (including vacancies) of Middlefield is six or more, the directors must be classified into at least two classes, as nearly equal in number as possible and consisting of no fewer than three directors in each class, designated Class I, Class II, and if there are nine or more directors, Class III. Our board currently consists of ten directors.

| | Age | Director since | Current term expires | Biography |
|---------------------|------------|-----------------------|-----------------------------|---|
| Thomas G. Caldwell | 59 | 1997 | 2019 | Mr. Caldwell is President and Chief Executive Officer of Middlefield, The Middlefield Banking Company, and EMORECO, Inc. Mr. Caldwell served as Vice President of Middlefield until October 2000, when he became President and CEO. Mr. Caldwell's experience in the banking and financial services industry and significant leadership positions with Middlefield, The Middlefield Banking Company, and EMORECO, Inc. allow him to provide business and leadership expertise to the board. |
| James R. Heslop, II | 62 | 2001 | 2018 | Executive Vice President and Chief Operating Officer of The Middlefield Banking Company since 1996, Mr. Heslop became Executive Vice President and Chief Operating Officer of Middlefield on October 30, 2000. He became a director of the bank in July 1999 and a director of Middlefield on November 19, 2001. He is also the Vice President and Secretary and a director of EMORECO, Inc. From July 1993 until joining The Middlefield Banking Company in April 1996, Mr. Heslop was a Director, President, and Chief Executive Officer of First County Bank in Chardon, Ohio, an institution with total assets exceeding \$40 million. First County Bank was an affiliate of FNB Corporation of Hermitage, Pennsylvania. Mr. Heslop earned a B.S. in Business Administration from Wheeling College, an M.B.A. from Tiffin University, and is a graduate of the Graduate School of Banking at the University of Wisconsin-Madison. Mr. Heslop's education, experience in the banking and financial services industry, and significant leadership positions with Middlefield, The Middlefield Banking Company, and EMORECO, Inc. allow him to provide business and leadership expertise to the board. |
| Eric W. Hummel | 71 | 2011 | 2017 | |

Mr. Hummel is President of Hummel Construction, Ravenna, Ohio, a position he has held since 1971. Mr. Hummel attended the Kent State University School of Architecture and the University of Wisconsin College of Engineering. He has been a member of the Portage Foundation Board of Trustees, Kent State University Architecture School Foundation, and Leadership Portage County Board. Mr. Hummel's extensive business management experience allows him to provide business and leadership expertise to the board.

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| | Age | Director since | Current term expires | Biography |
|-------------------|------------|-----------------------|-----------------------------|---|
| Kenneth E. Jones | 68 | 2008 | 2017 | A self-employed financial consultant and advisor, Mr. Jones earned a B.S. in Nuclear Engineering from the University of Virginia in 1970 and an M.B.A. from the University of Virginia in 1972. He is also licensed in Ohio as a CPA (inactive). Mr. Jones is a former director of Applied Innovation, Inc. of Dublin, Ohio (NASDAQ), and served as Chairman of its Audit Committee. He has served as the elected fiscal officer of Jefferson Township, Franklin County, Ohio since May 2004. Mr. Jones' financial and business experience and his service as a director of Middlefield since 2008 allow him to provide business and leadership expertise to the board. |
| Darryl E. Mast | 66 | 2013 | 2019 | Darryl Mast is part of the Hattie Larlham organization, a non-profit organization dedicated to improving the lives of children and adults with developmental disabilities. Mr. Mast currently serves as Chief Operations Officer for Hattie Larlham Care Group and Hattie Larlham Foundation, with responsibility for IT and phone systems, facilities, vehicle fleet, housing development, as well as the accounting, finance, and human resource departments. Mr. Mast previously was a Senior Vice President at Second National Bank of Warren and an executive officer of its holding company, Second Bancorp Inc., with responsibility for 33 retail banking centers, private banking, consumer lending, call center, web site, and on-line banking. He also served on the Asset/Liability and other committees. While at Second National Bank Mr. Mast also served as President of the Hattie Larlham Foundation and as Treasurer of the Hattie Larlham Care Group. He has served on various Hattie Larlham boards since 1996. Mr. Mast has served as President of the Rotary Club of Warren and has been involved with numerous community-based organizations, including the Advisory Board of Kent State University's Trumbull Campus, the Warren Area Chamber of Commerce Economic Development Foundation, and the Wooster Area Chamber of Commerce. Mr. Mast has attended Miami University in Oxford, Ohio and the Graduate School of Banking at the University of Wisconsin. Mr. Mast's banking experience, his demonstrated leadership ability, and his community involvement add important business and leadership expertise to the board. |
| James J. McCaskey | 53 | 2004 | 2017 | Mr. McCaskey is the President of McCaskey Landscape & Design, LLC, a design-build landscape development company. Mr. McCaskey is also a past member of the Board of Directors and past President of the Ohio Landscape Association. Previously, he was Vice President of Sales for the Pattie Group, |

also a design-build landscape development company, with which he had been employed for seventeen years. Mr. McCaskey also serves on the Advisory Board of Kent State University (Geauga), was President of the Chardon Rotary for the term July 2014 through June 2015, and beginning January 2, 2014 serves as Munson Township Trustee. Mr. McCaskey earned a Bachelor's

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| | Age | Director since | Current term expires | Biography |
|---------------------|------------|-----------------------|-----------------------------|--|
| | | | | Degree in Agricultural Production and a Bachelor's Degree in Biology from Wilmington College in 1985. Mr. McCaskey's extensive business management experience, community involvement, and service as a director of Middlefield since 2004 allow him to provide business and leadership expertise to the board. |
| Clayton W. Rose III | 64 | 2016 | 2018 | Mr. Rose is an Executive Principal in the Dublin, Ohio office of Rea & Associates Inc. CPA's. He is a licensed CPA. Rea & Associates is a regional public accounting firm with eleven offices in the state of Ohio. Mr. Rose earned a B.S. from The Ohio State University in 1974. He is active in the Dublin community with involvement in Kiwanis, the Dublin Convention and Visitors Bureau, the Dublin Irish Festival, and the Ohio State University Alumni Society. Mr. Rose was a director of Emerald Bank when it merged into The Middlefield Banking Company on January 20, 2014. He became a director of The Middlefield Banking Company shortly after the January 2014 merger. Mr. Rose's business and accounting experience allow him to provide accounting and financial management expertise to the board. |
| William J. Skidmore | 60 | 2007 | 2019 | Mr. Skidmore is Northeast Ohio Senior District Manager of Waste Management and has held progressively responsible positions with Waste Management and a predecessor company since 1978. He previously served on the Board of Directors of both First County Bank in Chardon, Ohio, and of Metropolitan National Bank in Youngstown, Ohio. He is a member and was the past President of the Chardon Rotary, a former President of the Chardon Chamber of Commerce, a former member of the business advisory committee of Kent State University (Geauga), and a past representative to the board of the National Solid Waste Management Association in Washington, D. C. Mr. Skidmore earned a Bachelor's Degree in Sales and Marketing from Bowling Green State University in 1978. Mr. Skidmore's business management and banking experience in the northeast Ohio market allow him to provide business and leadership expertise to the board. |
| Robert W. Toth | 71 | 2009 | 2018 | Mr. Toth retired in 2007 as the President of Gold Key Processing, Ltd., headquartered in Middlefield, Ohio. Mr. Toth is a graduate of Ohio University, with a B.B.A. in accounting. Prior to joining Gold Key, he was Vice President Finance and Administration for Burton Rubber Processing, Inc. Having begun his career with Amsted Industries in Chicago, Illinois, Mr. Toth has held progressively responsible positions with |

Warner and Swasey Co. and Missouri Portland Cement Co. He has a long record of community service and currently sits on the Board of the Geauga County Library Foundation. Mr. Toth's extensive business management and community service experience allow him to provide business and leadership expertise to the board.

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| | Age | Director since | Current term expires | Biography |
|-----------------|-----|----------------|----------------------|---|
| Carolyn J. Turk | 60 | 2004 | 2019 | Ms. Turk is the Controller of Molded Fiber Glass Companies and is a licensed CPA. Located in Ashtabula, Ohio, Molded Fiber Glass Companies is a manufacturer of reinforced fiber glass products, with 14 entities in the U.S. and Mexico. Ms. Turk earned a B.S. in Accountancy from Youngstown State University in 1984. She has a long record of community service and currently sits on the Board of Country Neighbor Program, Inc. and the Ashtabula Foundation. Ms. Turk's business and accounting experience allow her to provide accounting and financial management expertise to the board. |

Director Compensation. The following table shows the compensation paid to nonemployee directors for their service in 2015, including their service on our board, on the board of The Middlefield Banking Company, and on board committees of Middlefield and The Middlefield Banking Company. The compensation of Directors Caldwell and Heslop is included in the Summary Compensation Table. Director Rose was not a director in 2015.

| | (\$) Fees Earned or Paid in Cash | (\$) Stock Awards * | (\$) Option Awards | (\$) Non-Equity Incentive Plan Compensation | (\$) Nonqualified Deferred Compensation Earnings | (\$) All Other Compensation | (\$) Total |
|---------------------|---|---------------------------|--------------------------|---|--|--------------------------------------|---------------|
| Eric W. Hummel | 40,200 | 2,048 | 0 | n/a | n/a | 0 | 42,248 |
| Kenneth E. Jones | 45,800 | 2,048 | 0 | n/a | n/a | 0 | 47,848 |
| Darryl E. Mast | 43,750 | 2,048 | 0 | n/a | n/a | 0 | 45,798 |
| James J. McCaskey | 39,350 | 2,048 | 0 | n/a | n/a | 0 | 41,398 |
| William J. Skidmore | 47,850 | 2,048 | 0 | n/a | n/a | 0 | 49,898 |
| Robert W. Toth | 43,750 | 2,048 | 0 | n/a | n/a | 0 | 45,798 |
| Carolyn J. Turk | 54,600 | 2,048 | 0 | n/a | n/a | 0 | 56,648 |

* Each nonemployee director was awarded 65 fully vested shares on August 10, 2015. The price of our stock on that date was \$31.50.

Middlefield directors receive compensation of \$750 for each board and committee meeting attended. Middlefield's Chairman of the Board receives additional annual compensation of \$4,000. The Middlefield Banking Company directors receive compensation of \$1,800 per month less \$100 for each meeting not attended in a particular month. The Middlefield Banking Company directors also receive \$500 in committee fees for each meeting attended. The 2015 compensation of Director Jones includes \$2,700 for his service on our Central Ohio Regional Advisory Board. Directors of EMORECO, Inc. receive no compensation for board service.

At the 2001 annual meeting shareholders approved the form and use of indemnification agreements for directors. The indemnification agreements allow directors to select the most favorable indemnification rights provided under (1) Middlefield's Second Amended and Restated Articles of Incorporation or Regulations in effect on the date of the indemnification agreement or on the date expenses are incurred, (2) state law in effect on the date of the

indemnification agreement or on the date expenses are incurred, (3) any liability insurance policy in effect when a claim is made against the director or on the date expenses are incurred, and (4) any other indemnification arrangement otherwise available. The agreements cover all fees, expenses, judgments, fines, penalties, and settlement amounts paid in any matter relating to the director's role as a Middlefield director, officer, employee, agent, or when serving as Middlefield's representative with respect to another entity. Each indemnification agreement provides for the prompt advancement of all expenses incurred in connection with any proceeding subject to the director's obligation to repay those advances if it is determined later that the director is not entitled to indemnification.

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Executive Officers Who Do Not Also Serve as Directors. There are no family relationships among any of Middlefield's directors or executive officers. Executive officers who do not also serve as directors are

| | Age | Principal Occupation in the Last 5 Years |
|-------------------------|------------|---|
| David G. Dalessandro | 60 | Mr. Dalessandro is Senior Vice President/Chief Credit Officer for The Middlefield Banking Company. Prior to joining the bank in July 2014, he was Senior Vice President and Director of Credit Audit with PNC Financial Services group. Mr. Dalessandro has also served as an Examiner with the Federal Reserve Bank of Cleveland. He is a graduate of Pennsylvania State University with a B.S. degree in Accounting and Youngstown State University with an Executive M.B.A. Mr. Dalessandro is also a Certified Public Accountant (inactive). |
| Courtney M. Erminio | 34 | Serving as Vice President Risk Officer, Ms. Erminio joined The Middlefield Banking Company in June 2010. Prior thereto, she was on the internal audit staff of Crowe Horwath LLP. Ms. Erminio is a graduate of the University of Akron, holding a B.S. degree in Business Administration/Finance. |
| Teresa M. Hetrick | 53 | Ms. Hetrick is Senior Vice President Operations/Administration. Ms. Hetrick served as Vice President and Secretary of First County Bank in Chardon, Ohio before joining The Middlefield Banking Company in December 1996. |
| Eric P. Hollinger | 55 | Mr. Hollinger is the Senior Vice President/Senior Lender for The Middlefield Banking Company. Prior to joining the bank in 2013, he was a Senior Vice President/Commercial Lender for FirstMerit Bank. Mr. Hollinger holds a B.S. degree in Business Administration/Marketing from Bowling Green State University and an M.B.A. from Case Western Reserve University. |
| Charles O. Moore | 54 | Mr. Moore joined The Middlefield Banking Company in January 2016 as President Central Ohio Region. With over 25 years of banking experience, most recently Mr. Moore served as Executive Vice President, Chief Risk and Consumer Lending Officer, of Delaware County Bank in Delaware, Ohio. He has also served as President of Regency Finance Company, a subsidiary of F.N.B. Corporation, and as an executive with U.S. Bank and Banc One. He is a veteran of the U.S. Marine Corps and the U.S. Army National Guard. He is a graduate of Ohio Dominican College and the University of the State of New York. Mr. Moore was formerly the Deputy Superintendent of Consumer Finance and Consumer Affairs for the State of Ohio Division of Financial Institutions. He is currently on the boards of the Ohio Mortgage Bankers Association, the Ohio Dominican College Patriots and Finance curriculum, the Central Ohio Symphony Orchestra, and the Delaware County United Way. |
| Donald L. Stacy | 63 | Mr. Stacy joined The Middlefield Banking Company in August 1999 and serves as its Senior Vice President and Chief Financial Officer. Mr. Stacy also is a director, Vice President, and Treasurer of EMORECO, Inc. On October 30, 2000, he was appointed as the Treasurer and Chief Financial Officer of Middlefield. He previously served for 20 years with Security Dollar Bank and Security Financial Corp. in Niles, Ohio, where he was Senior Vice President and Treasurer. |
| Alfred F. Thompson, Jr. | 57 | |

Mr. Thompson is The Middlefield Banking Company's Vice President/Loan Administration and a director and Vice President of EMORECO, Inc. Mr. Thompson has been with The Middlefield Banking Company since March 1996. He was promoted from loan officer to Assistant Vice President in 1997, and promoted again to his current position in 1998. Before joining The Middlefield Banking Company, Mr. Thompson served as Loan Officer in the Small Business Group of National City Bank, Northeast.

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Executive Compensation. The majority of the compensation of executive officers is paid by The Middlefield Banking Company, but compensation shown in the table is aggregate compensation paid by Middlefield, The Middlefield Banking Company, and Emerald Bank. No compensation is paid by EMORECO, Inc. Emerald Bank merged into The Middlefield Banking Company on January 20, 2014.

SUMMARY COMPENSATION TABLE

| Name and Principal Position | Year | Salary (\$ (1)) | Bonus (\$ (2)) | Awards (\$ (5)) | Option Awards (\$ (6)) | Non-Equity Incentive Plan Compensation | | All Other Compensation (\$ (4)) | Total (\$) |
|--|------|--------------------|-------------------|--------------------|------------------------------|--|--------------------------------------|---------------------------------------|---------------|
| | | | | | | Compensation (\$ (3)) | Deferred Compensation (\$ (7)) | | |
| Thomas G. Caldwell President and Chief Executive Officer | 2015 | 303,196 | 0 | 0(5) | 0 | 81,837 | 0 | 42,810 | 427,843 |
| | 2014 | 292,081 | 0 | 0 | 0 | 63,120 | 0 | 45,465 | 400,666 |
| James R. Heslop, II Executive Vice President and Chief Operating Officer | 2015 | 240,161 | 0 | 0(5) | 0 | 42,142 | 0 | 33,125 | 315,427 |
| | 2014 | 230,977 | 0 | 0 | 0 | 32,498 | 0 | 35,167 | 298,641 |
| Donald L. Stacy Chief Financial Officer and Treasurer | 2015 | 166,378 | 0 | 0(5) | 0 | 33,197 | 0 | 25,926 | 225,501 |
| | 2014 | 159,910 | 0 | 0 | 0 | 25,600 | 0 | 27,548 | 213,057 |

- (1) Includes salary deferred at the election of the executive under The Middlefield Banking Company's 401(k) retirement plan. Also includes fees for service as a director. Mr. Caldwell's director fees were \$29,750 in 2015 and \$28,350 in 2014. Mr. Heslop's director fees were \$29,000 in 2015 and \$28,350 in 2014.
- (2) Bonus amounts are attributable to performance in the year shown but are paid in the first quarter of the following year.
- (3) The 2015 cash incentive payments under The Middlefield Banking Company's Annual Incentive Plan were made on March 4, 2016, based on financial performance and the executives' performance in 2015, and the 2014 cash incentive payments were made in February of 2015, based on financial performance and the executives' performance in 2014.
- (4) The figures in the All Other Compensation column are the sum of matching contributions under The Middlefield Banking Company's 401(k) plan and contributions and interest earnings credited by The Middlefield Banking Company for each executive under the executive deferred compensation agreements. The bank made contributions of \$8,196 to the 401(k) plan account of Mr. Caldwell in 2015, \$6,329 to the account of Mr. Heslop, and \$4,986 to the account of Mr. Stacy. The 2015 contributions and interest earnings for the executive deferred compensation agreements were contributions of \$27,352 and interest earnings of \$7,262 for Mr. Caldwell, contributions of \$21,124 and interest earnings of \$5,672 for Mr. Heslop, and contributions of \$16,640 and interest earnings of

\$4,300 for Mr. Stacy.

- (5) Messrs. Caldwell, Heslop, and Stacy received conditional stock awards on June 22, 2015. The number of shares awarded was 814 shares to Mr. Caldwell, 628 shares to Mr. Heslop, and 495 shares to Mr. Stacy. To become vested in and entitled to that number of shares, two conditions must be satisfied. The first condition is the executive must maintain continuous service with Middlefield for three years, although this condition will be waived in the case of death or disability or a change in control occurring in the three-year period. The second condition is the average annual return of Middlefield stock for the years 2015, 2016, and 2017 must be at least 8.00%. For this purpose annual return is the sum of annual dividends and the excess of the closing stock price on the final trading day of the year over the closing price on the final trading day of the preceding year, divided by the closing stock price on the final trading day of the preceding year. The three-year average of the annual returns for 2015, 2016, and 2017 will determine whether the 8.00% goal is satisfied. If the 8.00% goal is not satisfied but the average annual return is positive, the recipient will become the owner of and entitled to a portion of the conditional stock award, forfeiting the remainder. The portion that will be issued to the recipient is the percentage of the total award equal to the percentage achievement of the 8.00% goal. If the average annual return is negative, the entire award is forfeited, unless the Compensation Committee waives the performance condition. If average annual return exceeds 8.00%, the nominal amount of the conditional stock award will increase, up to a maximum of 125% of the nominal award, increasing based on the percentage excess of actual average return over the 8.00% goal. Accordingly, the maximum potential conditional stock award total for Mr. Caldwell is 1,018 shares, for Mr. Heslop 785 shares, and for Mr. Stacy 619 shares. The terms of the award and a copy of the form of conditional award agreement are included in the Form 8-K Current Report filed by Middlefield with the SEC on June 24, 2015. The closing stock price on December 31, 2014 was \$33.61. The closing stock price on December 31, 2015 was \$32.40, and dividends per share for 2015 were \$1.07. Based on this, the return for 2015 was negative, or (0.42)%, but the award nevertheless be earned in full if the average annual return at the end of 2017 is at least 8.00%. Middlefield determined that the stock awards had no fair value on the award date for accounting purposes, and as a result no compensation expense was recognized for the awards in 2015.

Perquisites and other personal benefits provided to each of the named executive officers in 2015 and 2014 had a value of less than \$10,000. The value of insurance on the lives of the named executive officers is not

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included in the Summary Compensation Table because the executives have no interest in the policies. However, the executives are entitled to designate the beneficiary of death benefits payable by The Middlefield Banking Company under executive survivor income agreements. See the *Executive Survivor Income Agreements* discussion below.

Annual Incentive Plan. In 2003 The Middlefield Banking Company established the Annual Incentive Plan, a short-term cash incentive plan that rewards employees with additional cash compensation if specific objectives are achieved. An employee's potential cash incentive payment under the Annual Incentive Plan depends upon two factors: (x) the employee's position, which establishes a maximum cash incentive award as a percent of base salary, and (y) the degree to which the performance targets, such as targeted net income, and individual performance targets, are achieved. Annual incentive payments under the plan for a particular year generally are based on objective financial performance criteria established by the board, with the Compensation Committee's recommendation. A copy of the plan is included as exhibit 10.22 to the Form 8-K Current Report that we filed with the SEC on June 12, 2012, which is available for viewing or download at www.sec.gov. All employees are eligible for awards under the Annual Incentive Plan. The plan is terminable by the board at any time.

The bank-wide performance objectives that had to be achieved in 2015 in order for Messrs. Caldwell, Heslop, and Stacy to receive a cash incentive payment under the plan included a net income goal, a goal for reduction of adversely classified loans as a percent of the sum of tier 1 capital and the allowance for loan and lease losses, a goal for loan growth, and a goal having to do with the regulatory and supervisory status of Middlefield and The Middlefield Banking Company. Please see the Form 8-K Current Report filed by Middlefield with the SEC on June 18, 2015 for additional information. In future years other financial performance measures could be taken into account, such as return on average equity (ROAE), return on average assets (ROAA), deposit growth, and net interest margin. The Compensation Committee also considers individual performance goals.

2007 Omnibus Equity Plan. The 2007 Omnibus Equity Plan authorizes the issuance of 160,000 shares of Middlefield common stock. Middlefield's Compensation Committee administers the Omnibus Equity Plan. Shares of common stock issued under the Omnibus Equity Plan may be treasury shares, authorized and unissued shares not reserved for any other purpose, or a combination of treasury shares and authorized but unissued shares. Awards to employees may take the form of incentive stock options, or *ISOs*, that qualify for favored tax treatment under Internal Revenue Code section 422, stock options that do not qualify under section 422, referred to as *NQSOs*, stock appreciation rights, or *SARs*, restricted stock, and performance shares. In contrast to the kinds of awards that may be made to employees, non-employee directors are eligible for awards of *NQSOs* and restricted stock only. The terms of each award are stated in award agreements. Of the shares authorized for issuance under the Omnibus Equity Plan, up to one half may be reserved for issuance under incentive stock options. The aggregate number of shares underlying awards granted to an individual participant in a single year may not exceed 16,000.

Unless the participant's award agreement provides otherwise, when a participant employee's service terminates or when a non-employee director participant's service terminates the portion of any award held by the participant that is not exercisable is forfeited. All *NQSOs*, *SARs*, and *ISOs* held by the participant that are exercisable are forfeited if not exercised before the earlier of the expiration date specified in the award agreement or 90 days after termination occurs. However, all of a participant's outstanding awards are forfeited if the participant's employment or director service terminates for cause or if in Middlefield's judgment a basis for termination for cause exists, regardless of whether the awards are exercisable and regardless of whether the participant's employment or director service actually terminates. However, shares of restricted stock or performance shares that have been released from escrow and distributed to the participant are not affected by a termination for cause.

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If a change in control of Middlefield occurs, the Compensation Committee has broad authority and sole discretion to take actions it deems appropriate to preserve the value of participants' awards. In general, a change in control means one or more of the following events occur

a change in the composition of Middlefield's board of directors, after which the incumbent members of the board on the effective date of the Plan—including their successors whose election or nomination was approved by those incumbent directors and their successors—no longer represent a majority of the board,

a person (other than persons such as subsidiaries or benefit plans) becomes a beneficial owner of Middlefield securities representing 25% or more of the combined voting power of all securities eligible to vote for the election of directors, excepting business combinations after which Middlefield's shareholders own more than 50% of the resulting company and except for stock issuances approved by incumbent directors and their successors;

a merger, consolidation, share exchange, or similar form of business combination transaction requiring approval of Middlefield's shareholders, excepting business combinations after which Middlefield's shareholders own more than 50% of the resulting company; or

Middlefield's shareholders approve a plan of complete liquidation or dissolution or sale of all or substantially all of Middlefield's assets.

Executive Deferred Compensation Agreements. The Middlefield Banking Company entered into executive deferred compensation agreements with Messrs. Caldwell, Heslop, and Stacy on December 28, 2006. Amended on May 9, 2008 for compliance with Internal Revenue Code section 409A, the executive deferred compensation agreements provide supplemental retirement income benefits. The arrangement is noncontributory, meaning contributions can be made solely by The Middlefield Banking Company. For each year the executive remains employed with The Middlefield Banking Company, until attaining age 65, The Middlefield Banking Company may credit each executive with a contribution equal to 5% of the executive's base annual salary. Contributions exceeding 5% of salary are conditional on achievement of performance goals: (x) The Middlefield Banking Company's net income for the plan year and (y) The Middlefield Banking Company's peer ranking for the plan year, based on the Uniform Bank Performance Report available on the Federal Financial Institutions Examination Council's website at www.ffiec.gov/UBPR.htm. The UBPR is an analytical tool created for bank supervisory, examination, and management purposes. In a concise format, the UBPR shows the impact of management decisions and economic conditions on a bank's performance and balance-sheet composition.

Each of the two performance goals can account for a contribution of up to 7.5% of the executive's base annual salary. The net income goal for each year is established by the Compensation Committee by March 31 of that year. The Compensation Committee's decisions are not final unless approved by a majority of Middlefield's independent directors.

Executive Survivor Income Agreements. The Middlefield Banking Company entered into executive survivor income agreements with executives in June 2003, including Messrs. Caldwell, Heslop, and Stacy. The agreements promise a specific cash benefit payable by The Middlefield Banking Company to an executive's designated beneficiary at the executive's death, provided the executive dies before attaining age 85. The benefit would be paid to the

executive's beneficiary if the executive dies in active service to The Middlefield Banking Company, but it also would be payable for death occurring after the executive's termination of service if the executive terminated (x) because of disability, or (y) within 12 months after a change in control of Middlefield, or (z) after having attained age 55 with at least ten years of service to The Middlefield Banking Company or after having attained age 65.

The total death benefit payable to Mr. Caldwell's beneficiaries if he dies in active service to The Middlefield Banking Company is \$471,741, the benefit payable to Mr. Heslop's beneficiaries is \$368,970, and

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the benefit payable to Mr. Stacy's beneficiaries is \$222,619. For death after terminating active service with The Middlefield Banking Company, the death benefit for Mr. Caldwell's beneficiaries is \$471,741, \$368,970 for Mr. Heslop's beneficiaries, and \$111,309 for Mr. Stacy's beneficiaries. To assure itself of funds sufficient to pay the promised death benefits, The Middlefield Banking Company purchased insurance on the executives' lives with a single premium payment. The Middlefield Banking Company owns the policies and is the sole beneficiary. Of the total premium paid for the insurance on the various executives' lives, \$495,873 is attributable to insurance purchased on the life of Mr. Caldwell, \$447,351 is attributable to insurance on the life of Mr. Heslop, and \$333,890 is attributable to insurance purchased on the life of Mr. Stacy. The premium amounts are not included in the Summary Compensation Table. The Middlefield Banking Company expects the policies' death benefits to be sufficient to pay all benefits promised under the executive survivor income agreements.

Severance Agreements. Middlefield and its subsidiaries do not have written employment agreements with officers, although Middlefield entered into severance agreements with executives, including Messrs. Caldwell, Heslop, and Stacy. The severance agreements provide that the executive is entitled to severance compensation if a change in control occurs during the term of the agreement. The severance compensation is payable in a single lump sum. For purposes of the severance agreements, the term change in control is defined as it is defined in Internal Revenue Code section 409A and implementing rules. In the case of executives other than Messrs. Caldwell, Heslop, and Stacy, the lump-sum severance benefit is payable immediately after involuntary termination without cause or voluntary termination with good reason occurring within 24 months after a change in control. Rather than being contingent on a separation from service after a change in control, the lump-sum benefit of Messrs. Caldwell, Heslop, and Stacy is payable immediately after a change in control occurs.

The agreements promise to each executive a lump-sum payment calculated as a multiple of the executive's salary and the executive's cash bonus and cash incentive compensation. The multiple of compensation payable under the severance agreements is 2.5 times in the case of Mr. Caldwell and Mr. Heslop and two times compensation for other executives. The agreements also promise continued life, health, and disability insurance coverage for 24 months after employment termination and legal fee reimbursement if the severance agreements are challenged after a change in control.

Retirement Plan. Middlefield does not maintain a defined benefit or actuarial plan providing retirement benefits for officers or employees based on actual or average final compensation. But The Middlefield Banking Company maintains a section 401(k) employee savings and investment plan for substantially all employees and officers who have more than one year of service. The bank's contribution to the plan is based on 50% matching of voluntary contributions, up to 6% of compensation. An eligible employee may contribute up to 15% of his or her salary. Employee contributions are vested at all times. Bank contributions are fully vested after six years, vesting in 20% annual increments beginning with the second year. Employees also have life insurance benefits under a group term life insurance program, paying benefits to an employee's beneficiary if the employee dies while employed by The Middlefield Banking Company, up to the lesser of (x) twice the employee's annual salary at the time of death or (y) \$200,000.

Internal Revenue Code Limits. The qualifying compensation regulations issued by the Internal Revenue Service under Internal Revenue Code section 162(m) state that no deduction is allowed for applicable employee remuneration paid by a publicly held corporation to a covered employee to the extent that the remuneration exceeds \$1 million for the applicable taxable year, unless specified conditions are satisfied. Salary and bonus amounts deferred by executives are not subject to section 162(m). Currently, Middlefield's remuneration is not expected to exceed \$1 million for any employee. Therefore, Middlefield does not expect that compensation will be affected by the qualifying compensation regulations. The Compensation Committee and Middlefield's board intend to maintain executive compensation within the section 162(m) deductibility limits, but could permit compensation exceeding the section 162(m) limits in the

future.

Transactions with Related Parties. Middlefield directors and executive officers and their associates are customers of and enter into banking transactions with The Middlefield Banking Company in the ordinary course

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of business. Middlefield expects that these relationships and transactions will continue. The transactions with directors, executive officers, and their associates have not involved more than the normal risk of collectability and have not presented other unfavorable features. Loans and commitments to lend included in these transactions were made and will be made on substantially the same terms including interest rates and collateral as those prevailing at the time for comparable transactions with persons not affiliated with Middlefield.

The following table shows as of December 31, 2015 unvested and unearned stock awards and the number of shares acquirable, exercise prices, and expiration dates of all unexercised stock options held by the executives identified in the Summary Compensation Table.

OUTSTANDING EQUITY AWARDS

| Name | Exercisable | Unexercisable | Option Awards (1) | | Stock Awards (1) | | | | |
|---------------------|-------------|---------------|---|---|---|--|---|--|--------|
| | | | Number of Securities Underlying Unexercised Options (#) | Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Option Price (\$) | Market Value of Shares or Units of Stock That Have Not Vested (#) | Market Value of Shares or Units of Stock That Have Not Vested (\$) | Number of Unearned Shares, or Other Rights That Have Not Vested (2) | Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, or Other Rights That Have Not Vested (\$) | |
| Thomas G. Caldwell | 525 | | | 40.24 | 12/11/2016 | | | 814 | 26,374 |
| | 1,000 | | | 23.00 | 11/10/2018 | | | | |
| | 1,500 | | | 23.00 | 11/10/2018 | | | | |
| | 2,500 | | | 17.55 | 05/09/2021 | | | | |
| James R. Heslop, II | 525 | | | 40.24 | 12/11/2016 | | | 628 | 20,347 |
| | 1,000 | | | 23.00 | 11/10/2018 | | | | |
| | 1,950 | | | 17.55 | 05/09/2021 | | | | |
| Donald L. Stacy | 525 | | | 40.24 | 12/11/2016 | | | 495 | 16,038 |

| | | |
|-------|-------|------------|
| 750 | 37.00 | 12/10/2017 |
| 2,500 | 17.55 | 05/09/2021 |

(1) adjusted for stock dividends

(2) Messrs. Caldwell, Heslop, and Stacy received conditional stock awards on June 22, 2015. To become vested in and entitled to the shares, two conditions must be satisfied. The first condition is the executive must maintain continuous service with Middlefield for three years, although this condition will be waived in the case of death or disability or a change in control occurring in the three-year period. The second condition is the average annual return of Middlefield stock for the years 2015, 2016, and 2017 must be at least 8.00%. For this purpose annual return is the sum of annual dividends and the excess of the closing stock price on the final trading day of the year over the closing price on the final trading day of the preceding year, divided by the closing stock price on the final trading day of the preceding year. If the 8.00% goal is not satisfied but the average annual return is positive, the recipient will become the owner of and entitled to a portion of the conditional stock award, forfeiting the remainder. The portion that will be issued to the recipient is the percentage of the total award equal to the percentage achievement of the 8.00% goal. If the average annual return is negative, the entire award is forfeited, unless the Compensation Committee waives the performance condition. If average annual return exceeds 8.00%, the nominal amount of the conditional stock award will increase, up to a maximum of 125% of the nominal award, increasing based on the percentage excess of actual average return over the 8.00% goal. Accordingly, the maximum potential conditional stock award total for Mr. Caldwell is 1,018 shares, for Mr. Heslop 785 shares, and for Mr. Stacy 619 shares. The terms of the award and a copy of the form of conditional award agreement are included in the Form 8-K Current Report filed by Middlefield with the SEC on June 24, 2015. The market value in the table is the number of shares multiplied by the \$32.40 closing stock price on December 31, 2015. The conditional stock awards do not confer any shareholder rights until the conditions are satisfied (or waived), such as voting rights, the right to dividends, or the right to transfer shares. Award recipients are not credited for dividends paid by Middlefield on common stock. The conditional stock award agreements include a prohibition against competing with Middlefield for one year after employment termination.

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Middlefield is a one-bank holding company. Middlefield's principal subsidiary is The Middlefield Banking Company, an Ohio-chartered, nonmember commercial bank. Middlefield's other subsidiary, EMORECO Inc., is an asset resolution corporation dedicated to the resolution and disposition of troubled assets of a central-Ohio bank that Middlefield acquired in 2007, specifically nonperforming loans and other real estate owned (OREO) held by the acquired bank as the result of borrower defaults on real estate-secured loans. That bank, Emerald Bank, operated as a separate subsidiary of Middlefield from 2007 through 2013, merging into The Middlefield Banking Company on January 20, 2014. At the end of September 2016 The Middlefield Banking Company had total assets of \$760.6 million and more than 140 employees.

The Middlefield Banking Company offers a broad range of banking services, including online banking and bill payment services for individuals and online cash management services for business customers at www.middlefieldbank.com. The Middlefield Banking Company's customers are small and medium-sized businesses, professionals, small business owners, and retail customers. Loan products include operational and working capital loans, loans to finance capital purchases, term business loans, residential construction loans, selected guaranteed or subsidized loan programs for small businesses, professional loans, residential and mortgage loans, and consumer installment loans to purchase automobiles, boats, make home improvements, and for other personal expenditures. The Middlefield Banking Company makes available customary deposit-related products and services, such as checking, savings, negotiable order of withdrawal accounts, money market accounts, time certificates of deposit, safe deposit facilities, and travelers' checks.

The Middlefield Banking Company operates in two distinct and very competitive markets, one in the northeastern Ohio counties of Geauga, Portage, Trumbull, Ashtabula, and Lake. The other market is central Ohio, specifically the Columbus area and Franklin County, the result of the 2007 acquisition of Emerald Bank. Ohio has a high concentration of financial service firms, many of which are significantly larger institutions with greater financial resources. Savings banks, savings and loan associations, commercial banks, mortgage banking companies, credit unions, insurance companies and other financial service companies compete to make loans. Savings and loan associations, savings banks, commercial banks, and credit unions compete for deposits, but non-depository entities such as mutual funds, securities and brokerage firms, and insurance companies also compete for depositors' funds.

The Middlefield Banking Company's operations have historically been concentrated in the area east of Liberty's market, in largely rural areas with a large Amish population. The Middlefield Banking Company's business originated in this market and was not an outgrowth of the nearby Cleveland-area or Akron-area markets. This includes Geauga County, where The Middlefield Banking Company's business began in 1901 and where four of its ten offices are located, and northern Portage County, where two offices are located, with a seventh office in Cortland in Trumbull County, an office in Orwell in southern Ashtabula County, and two offices in central Ohio, in Franklin County. The Middlefield Banking Company's eleventh banking office opened in October 2016 in Sunbury, also in central Ohio, in Delaware County. It also has a loan production office in Mentor, in Lake County. The Middlefield Banking Company's northeast Ohio market adjoins the market of Liberty, which is to the immediate west.

Lending *Loan Portfolio Composition and Activity.* The Middlefield Banking Company makes residential and commercial mortgage, home equity, secured and unsecured consumer installment, commercial and industrial, and real estate construction loans for owner-occupied and rental properties. The Credit Policy aspires to a loan composition mix consisting of approximately 40% to 50% consumer purpose transactions including residential real estate loans, home equity loans and other consumer loans. The Policy is also designed to provide for 35% to 40% of total loans as business purpose commercial loans and business and consumer credit card accounts of up to 5% of total loans.

Although Ohio law imposes no material restrictions on the types of loans The Middlefield Banking Company may make, real estate-based lending has historically been the primary focus. For prudential reasons,

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we avoid lending on the security of real estate located outside our market area. Ohio law does restrict the amount of loans an Ohio-chartered bank may make, generally limiting credit to any single borrower to less than 15% of capital. An additional margin of 10% of capital is allowed for loans fully secured by readily marketable collateral. This 15% legal lending limit has not been a material restriction on lending. We can accommodate loan volumes exceeding the legal lending limit by selling loan participations to other banks. As of September 30, 2016, The Middlefield Banking Company's 15%-of-capital limit on loans to a single borrower was approximately \$11.2 million.

The Middlefield Banking Company offers specialized loans for business and commercial customers, including equipment and inventory financing, real estate construction loans and Small Business Administration loans for qualified businesses. A substantial portion of The Middlefield Banking Company's commercial loans are designated as real estate loans for regulatory reporting purposes because they are secured by mortgages on real property. Loans of that type may be made for purposes of financing commercial activities, such as accounts receivable, equipment purchases and leasing, but they are secured by real estate to provide The Middlefield Banking Company with an extra measure of security. Although these loans might be secured in whole or in part by real estate, they are treated in the discussions to follow as commercial and industrial loans. The Middlefield Banking Company's consumer installment loans include secured and unsecured loans to individual borrowers for a variety of purposes, including personal, home improvements, revolving credit lines, autos, boats, and recreational vehicles.

The following table shows on a consolidated basis the composition of the loan portfolio in dollar amounts and in percentages along with a reconciliation to loans receivable, net.

| | At September 30 2016 | | 2015 | | Loan Portfolio Composition At December 31, 2014 | | 2013 | | 2012 | |
|-------------------------------------|-------------------------|---------|------------|---------|--|---------|------------|---------|------------|---------|
| | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent |
| (Dollars in thousands) | | | | | | | | | | |
| Type of loan: | | | | | | | | | | |
| Commercial and industrial | \$ 59,376 | 10.13% | \$ 42,536 | 7.97% | \$ 34,928 | 7.42% | \$ 54,498 | 12.51% | \$ 62,188 | 15.23 |
| Real estate construction | 17,633 | 3.01 | 22,137 | 4.15 | 30,296 | 6.44 | 25,601 | 5.88 | 22,522 | 5.51 |
| Mortgage: | | | 0 | 0.00 | | | | | | |
| Residential | 258,952 | 44.16 | 232,478 | 43.56 | 210,096 | 44.65 | 210,310 | 48.27 | 203,872 | 49.92 |
| Commercial | 245,636 | 41.89 | 231,701 | 43.41 | 190,685 | 40.52 | 141,171 | 32.40 | 115,734 | 28.34 |
| Consumer installment | 4,732 | 0.81 | 4,858 | 0.91 | 4,579 | 0.97 | 4,145 | 0.94 | 4,117 | 1.00 |
| Total loans | 586,329 | 100.00% | 533,710 | 100.00% | 470,584 | 100.00% | 435,725 | 100.00% | 408,433 | 100.00 |
| Less: | | | | | | | | | | |
| Allowance for loan and lease losses | 6,334 | | 6,385 | | 6,846 | | 7,046 | | 7,779 | |
| Net loans | \$ 579,995 | | \$ 527,325 | | \$ 463,738 | | \$ 428,679 | | \$ 400,654 | |

The following table presents consolidated maturity information for the loan portfolio. The table does not include prepayments or scheduled principal repayments. All loans are shown as maturing based on contractual maturities.

| (Dollars in thousands) | Loan Portfolio Maturity at September 30, 2016 | | | | | Total |
|--------------------------------------|---|--------------------------------|-------------------|------------------------|-------------------------|-------------------|
| | Commercial and Industrial | Real Estate Construction | Residential | Mortgage Commercial | Consumer Installment | |
| Amount due: | | | | | | |
| In one year or less | \$ 15,190 | \$ 2,295 | \$ 3,058 | \$ 5,172 | \$ 360 | \$ 26,075 |
| After one year through five years | 23,936 | 1,690 | 13,477 | 23,950 | 4,057 | 67,110 |
| After five years | 20,250 | 13,648 | 242,417 | 216,514 | 315 | 493,144 |
| Total amount due | \$ 59,376 | \$ 17,633 | \$ 258,952 | \$ 245,636 | \$ 4,732 | \$ 586,329 |

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Loans due on demand and overdrafts are included in the amount due in one year or less. The Middlefield Banking Company has no loans without a stated schedule of repayment or a stated maturity.

The following table shows on a consolidated basis the dollar amount of all loans due after September 30, 2016 that have pre-determined interest rates and the dollar amount of all loans due after September 30, 2016 that have floating or adjustable rates.

| | Fixed Rate | Adjustable Rate | Total |
|-------------------------------|-----------------------|----------------------------|-------------------|
| (Dollars in thousands) | | | |
| Commercial and industrial | \$ 38,169 | \$ 21,207 | \$ 59,376 |
| Real estate construction | 1,481 | 16,152 | 17,633 |
| Mortgage: | | | |
| Residential | 14,253 | 244,699 | 258,952 |
| Commercial | 52,151 | 193,485 | 245,636 |
| Consumer installment | 3,752 | 980 | 4,732 |
| | \$ 109,806 | \$ 476,523 | \$ 586,329 |

Residential Mortgage Loans A significant portion of The Middlefield Banking Company's lending consists of origination of conventional loans secured by 1-4 family real estate. Residential mortgage loans approximated \$232.5 million or 43.6% of The Middlefield Banking Company's total loan portfolio at December 31, 2015, and \$259.0 million or 44.2% at September 30, 2016.

The Middlefield Banking Company makes loans of up to 80% of the value of the real estate and improvements securing a loan (LTV ratio) on 1-4 family real estate. The Middlefield Banking Company generally does not lend in excess of the lower of 80% of the appraised value or sales price of the property. The Middlefield Banking Company offers residential real estate loans with terms of up to 30 years.

Approximately 94.9% of the portfolio of conventional mortgage loans secured by 1-4 family real estate at December 31, 2015 is adjustable rate, and 94.5% at September 30, 2016. Generally, The Middlefield Banking Company originates fixed-rate, single-family mortgage loans in conformity with Freddie Mac guidelines, so as to permit their being sold to Freddie Mac. These loans are sold with servicing rights retained, and are sold in furtherance of The Middlefield Banking Company's goal of better matching the maturities and interest rate sensitivity of its assets and liabilities. The Middlefield Banking Company generally retains responsibility for collecting and remitting loan payments, inspecting the properties, making certain insurance and tax payments on behalf of borrowers and otherwise servicing the loans it sells and receives a fee for performing these services. Sales of loans also provide funds for additional lending and other purposes.

The Middlefield Banking Company's home equity Credit Policy generally allows for a loan of up to 85% of a property's appraised value, less the principal balance of the outstanding first mortgage loan. The Middlefield Banking Company's home equity loans generally have terms of 20 years.

At December 31, 2015, residential mortgage loans of approximately \$4.1 million were over 90 days delinquent or nonaccruing on that date, representing 1.8% of the residential mortgage loan portfolio. At December 31, 2014, residential mortgage loans of approximately \$5.3 million were over 90 days delinquent or nonaccruing on that date,

representing 2.3% of the residential mortgage loan portfolio. At September 30, 2016, residential mortgage loans of approximately \$3.8 million were over 90 days delinquent or nonaccruing on that date, representing 1.5% of the residential mortgage loan portfolio.

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Commercial and Industrial Loans and Commercial Real Estate Loans. The Middlefield Banking Company's commercial loan services include:

- accounts receivable, inventory and working capital loans
- short-term notes
- renewable operating lines of credit
- selected guaranteed or subsidized loan programs for small businesses
- loans to finance capital equipment
- loans to professionals

term business loans

Commercial real estate loans include commercial properties occupied by the proprietor of the business conducted on the premises, and income-producing or farm properties. Although The Middlefield Banking Company makes agricultural loans, it currently does not have a significant amount of agricultural loans. The primary risks of commercial real estate loans are loss of income of the owner or occupier of the property and the inability of the market to sustain rent levels. Although commercial and commercial real estate loans generally bear more risk than single-family residential mortgage loans, they tend to be higher yielding, have shorter terms and provide for interest-rate adjustments. Accordingly, commercial and commercial real estate loans enhance a lender's interest rate risk management and, in management's opinion, promote more rapid asset and income growth than a loan portfolio composed strictly of residential real estate mortgage loans.

commercial real estate loans

Although a risk of nonpayment exists for all loans, certain specific risks are associated with various kinds of loans. One of the primary risks associated with commercial loans is the possibility that the commercial borrower will not generate income sufficient to repay the loan. The Middlefield Banking Company's Credit Policy provides that commercial loan applications must be supported by documentation indicating cash flow sufficient for the borrower to service the proposed loan. Financial statements or tax returns for at least three years must be submitted, and annual reviews are required for business purpose relationships of \$1,000,000 or more. Ongoing financial information is generally required for any commercial credit where the exposure is \$250,000 or more.

The fair value of collateral for collateralized commercial loans must exceed The Middlefield Banking Company's exposure. For this purpose fair value is determined by independent appraisal or by the loan officer's estimate employing guidelines established by the Credit Policy. Loans not secured by real estate generally have terms of five years or fewer, unless guaranteed by the U.S. Small Business Administration or other governmental agency, and term loans secured by collateral having a useful life exceeding five years may have longer terms. The Middlefield Banking Company's Credit Policy allows for terms of up to 15 years for loans secured by commercial real estate, and one year for business lines of credit. The maximum LTV ratio for commercial real estate loans is 80% of the appraised value or cost, whichever is less.

Real estate is commonly a material component of collateral for The Middlefield Banking Company's loans, including commercial loans. Although the expected source of repayment is generally the operations of the borrower's business or

personal income, real estate collateral provides an additional measure of security. Risks associated with loans secured by real estate include fluctuating land values, changing local economic conditions, changes in tax policies, and a concentration of loans within a limited geographic area.

At December 31, 2015 commercial and commercial real estate loans totaled \$274.2 million, or 51.4% of The Middlefield Banking Company's total loan portfolio. At December 31, 2015, commercial and commercial real estate loans of approximately \$3.3 million were over 90 days delinquent or nonaccruing on that date, and represented 1.2% of the commercial and commercial real estate loan portfolios. At December 31, 2014, commercial and commercial real estate loans totaled \$225.6 million, or 47.9% of The Middlefield Banking Company's total loan portfolio. At December 31, 2014, commercial and commercial real estate loans of approximately \$1.4 million were over 90 days delinquent or nonaccruing on that date, and represented 0.6% of the commercial and commercial real estate loan portfolios. At September 30, 2016, commercial and commercial real estate loans totaled \$305.0 million, or 52.0% of The Middlefield Banking Company's total loan portfolio. At September 30, 2016, commercial and commercial real estate loans of approximately \$2.7 million were over 90 days delinquent or nonaccruing on that date, and represented 0.9% of the commercial and commercial real estate loan portfolios.

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Real Estate Construction. The Middlefield Banking Company originates several different types of loans that it categorizes as construction loans, including:

residential construction loans to borrowers who will occupy the premises upon completion of construction,

residential construction loans to builders,

commercial construction loans, and

real estate acquisition and development loans.

Because of the complex nature of construction lending, these loans are generally recognized as having a higher degree of risk than other forms of real estate lending. The Middlefield Banking Company's fixed-rate and adjustable-rate construction loans do not provide for the same interest rate terms on the construction loan and on the permanent mortgage loan that follows completion of the construction phase of the loan. It is the norm for The Middlefield Banking Company to make residential construction loans without an existing written commitment for permanent financing. The Middlefield Banking Company's Credit Policy provides that The Middlefield Banking Company may make construction loans with terms of up to one year, with a maximum LTV ratio for residential construction of 80%. The Middlefield Banking Company also offers residential construction-to-permanent loans that have a twelve-month construction period followed by 30 years of permanent financing.

At December 31, 2015, real estate construction loans totaled \$22.1 million, or 4.1% of The Middlefield Banking Company's total loan portfolio. Real estate construction loans of approximately \$0.1 million were over 90 days delinquent or nonaccruing on that date, representing 0.6% of the real estate construction loan portfolio. At December 31, 2014, real estate construction loans totaled \$30.3 million, or 6.4% of The Middlefield Banking Company's total loan portfolio. Real estate construction loans of approximately \$0.6 million were over 90 days delinquent or nonaccruing on that date, representing 1.9% of the real estate construction loan portfolio. At September 30, 2016, real estate construction loans totaled \$17.6 million, or 3.0% of The Middlefield Banking Company's total loan portfolio. Real estate construction loans of approximately \$17,000 were over 90 days delinquent or nonaccruing on that date, representing .01% of the real estate construction loan portfolio.

Consumer Installment Loans The Middlefield Banking Company's consumer installment loans include secured and unsecured loans to individual borrowers for a variety of purposes, including personal, home improvement, revolving credit lines, autos, boats, and recreational vehicles. The Middlefield Banking Company does not currently do any indirect lending. Unsecured consumer loans carry significantly higher interest rates than secured loans. The Middlefield Banking Company maintains a higher loan loss allowance for consumer loans, while maintaining strict credit guidelines when considering consumer loan applications.

According to the Credit Policy, consumer loans secured by collateral other than real estate generally may have terms of up to five years, and unsecured consumer loans may have terms up to three years. Real estate security generally is required for consumer loans having terms exceeding five years.

At December 31, 2015, The Middlefield Banking Company had approximately \$4.9 million in its consumer installment loan portfolio, representing 0.9% of total loans. At December 31, 2015, 6.2% of consumer installment

loans were over 90 days delinquent or nonaccruing. At December 31, 2014, The Middlefield Banking Company had approximately \$4.6 million in its consumer installment loan portfolio, representing 1.0% of total loans. At December 31, 2014, 0.1% of consumer installment loans were over 90 days delinquent or nonaccruing. At September 30, 2016, The Middlefield Banking Company had approximately \$4.7 million in its consumer installment loan portfolio, representing .80% of total loans. At September 30, 2016, 0.0% of consumer installment loans were over 90 days delinquent or nonaccruing.

Loan Solicitation and Processing Loan originations are developed from a number of sources, including continuing business with depositors, other borrowers and real estate builders, solicitations by Bank personnel and walk-in customers.

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When a loan request is made, The Middlefield Banking Company reviews the application, credit bureau reports, property appraisals or evaluations, financial information, verifications of income, and other documentation concerning the creditworthiness of the borrower, as applicable to each loan type. The Middlefield Banking Company's underwriting guidelines are set by senior management and approved by the Board of Directors. The Credit Policy specifies each individual officer's loan approval authority. Loans exceeding an individual officer's approval authority are submitted to an Officer's Loan Committee, which has authority to approve loans up to \$2,000,000. The Board of Directors' Loan Committee acts as an approval authority for exposures over \$2,000,000 and up to \$5,000,000. Loans exceeding \$5,000,000 require approval from the full Board of Directors.

Income from Lending Activities The Middlefield Banking Company earns interest and fee income from its lending activities. Net of origination costs, loan origination fees are amortized over the life of a loan. The Middlefield Banking Company also receives loan fees related to existing loans, including late charges. Income from loan origination and commitment fees and discounts varies with the volume and type of loans and commitments made and with competitive and economic conditions. Note 1 to the Consolidated Financial Statements included herein contains a discussion of the manner in which loan fees and income are recognized for financial reporting purposes.

Mortgage Banking Activity The Middlefield Banking Company originates conventional loans secured by first lien mortgages on one-to-four family residential properties located within its market area for either portfolio or sale into the secondary market. During the year ended December 31, 2015, The Middlefield Banking Company recorded gains of \$0.3 million on the sale of \$17.6 million in loans receivable originated for sale. During the year ended December 31, 2014, The Middlefield Banking Company recorded gains of \$0.2 million on the sale of \$6.0 million in loans receivable originated for sale. For the nine months ended September 30, 2016, The Middlefield Banking Company recorded gains of \$0.3 on the sale of \$16.0 million in loans receivable originated for sale. The sold loans were sold on a servicing retained basis to Freddie Mac.

In addition to interest earned on loans and income recognized on the sale of loans, The Middlefield Banking Company receives fees for servicing loans that it has sold. Because The Middlefield Banking Company has data processing capacity that will allow it to expand its portfolio of serviced loans without incurring significant incremental expenses, The Middlefield Banking Company intends in the future to augment its portfolio of loans serviced by continuing to originate and sell such fixed-rate single-family residential mortgage loans with Freddie Mac while retaining servicing.

Income from these activities will vary from period to period with the volume and type of loans originated and sold, which in turn is dependent on prevailing mortgage interest rates and their effect on the demand for loans in The Middlefield Banking Company's market area.

Nonperforming Loans Late charges on residential mortgages and consumer loans are assessed if a payment is not received by the due date plus a grace period. When an advanced stage of delinquency appears on a single-family loan and if repayment cannot be expected within a reasonable time or a repayment agreement is not entered into, a required notice of foreclosure or repossession proceedings may be prepared by The Middlefield Banking Company's attorney and delivered to the borrower so that foreclosure proceedings may be initiated promptly, if necessary. The Middlefield Banking Company also collects late charges on commercial loans.

When The Middlefield Banking Company acquires real estate through foreclosure, voluntary deed, or similar means, it is classified as OREO until it is sold. When property is acquired in this manner, it is recorded at the lower of cost (the unpaid principal balance at the date of acquisition) or fair value, less anticipated cost to sell. Any subsequent write-down is charged to expense. All costs incurred from the date of acquisition to maintain the property are expensed. OREO is appraised during the foreclosure process, before acquisition when possible. Losses are recognized for the amount by which the book value of the related mortgage loan exceeds the estimated net realizable value of the

property.

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The Middlefield Banking Company undertakes regular review of the loan portfolio to assess its risks, particularly the risks associated with the commercial loan portfolio.

Classified Assets FDIC regulations governing classification of assets require nonmember commercial banks including The Middlefield Banking Company to classify their own assets and to establish appropriate general and specific allowances for losses, subject to FDIC review. The regulations are designed to encourage management to evaluate assets on a case-by-case basis, discouraging automatic classifications. Under this classification system, problem assets of insured institutions are classified as substandard, doubtful, or loss. An asset is considered substandard if it is inadequately protected by the current net worth and paying capacity of the obligor or of the collateral pledged, if any. Substandard assets include those characterized by the distinct possibility that the insured institution will sustain some loss if the deficiencies are not corrected. Assets classified as doubtful have all the weaknesses inherent in those classified substandard, with the added characteristic that the weaknesses make collection of principal in full on the basis of currently existing facts, conditions, and values highly questionable and improbable. Assets classified as loss are those considered uncollectible and of such little value that their continuance as assets without the establishment of a specific loss reserve is not warranted. Assets that do not expose The Middlefield Banking Company to risk sufficient to warrant classification in one of the above categories, but that possess some weakness, are required to be designated special mention by management.

When an insured institution classifies assets as either substandard or doubtful, it may establish allowances for loan losses in an amount deemed prudent by management. When an insured institution classifies assets as loss, it is required either to establish an allowance for losses equal to 100% of that portion of the assets so classified or to charge off that amount. An Ohio nonmember bank's determination about classification of its assets and the amount of its allowances is subject to review by the FDIC, which may order the establishment of additional loss allowances. Management also employs an independent third party to semi-annually review and validate the internal loan review process and loan classifications.

The Middlefield Banking Company experienced a decrease in substandard loans as of December 31, 2015. Loans secured by residential real estate and commercial real estate account for \$5.8 million and \$8.0 million of the substandard loans, respectively. These amounts represent 88.8% of The Middlefield Banking Company's substandard loans. As of September 30, 2016 and December 31, 2015, 2014, 2013, 2012, and 2011, consolidated classified loans were as follows:

| | Classified Loans at December 31, | | | | | | | | | | | |
|------------------------|----------------------------------|------------------------|----------|------------------------|----------|------------------------|----------|------------------------|----------|------------------------|----------|------------------------|
| | September 30, 2016 | | 2015 | | 2014 | | 2013 | | 2012 | | 2011 | |
| (Dollars in thousands) | Amount | Percent of total loans | Amount | Percent of total loans | Amount | Percent of total loans | Amount | Percent of total loans | Amount | Percent of total loans | Amount | Percent of total loans |
| Special mention | \$ 4,163 | 0.71% | \$ 5,297 | 0.99% | \$ 4,987 | 1.06% | \$ 4,685 | 1.08% | \$ 3,364 | 0.82% | \$ 2,653 | 0.66% |
| Substandard | 11,325 | 1.93% | 15,586 | 2.92% | 16,211 | 3.44% | 19,328 | 4.44% | 26,459 | 6.48% | 27,061 | 6.73% |
| Doubtful | 17 | 0.00% | 130 | 0.02% | 627 | 0.13% | 43 | 0.01% | 59 | 0.01% | 73 | 0.02% |

| | | | | | | | | | | | | |
|--------------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
| Total amount | \$ 15,505 | 2.64% | \$ 21,013 | 3.93% | \$ 21,825 | 4.63% | \$ 24,056 | 5.53% | \$ 29,882 | 7.31% | \$ 29,787 | 7.41% |
|--------------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|

Other than those disclosed above, The Middlefield Banking Company does not believe there are any loans classified for regulatory purposes as loss, doubtful, substandard, special mention or otherwise, which will result in losses or have a material impact on future operations, liquidity or capital reserves. We are not aware of any other information that causes us to have serious doubts as to the ability of borrowers in general to comply with repayment terms.

Investments Investment securities provide a return on residual funds after lending activities. Investments may be in federal funds sold, corporate securities, U.S. Government and agency obligations, state and local government obligations and government-guaranteed mortgage-backed securities. The Middlefield Banking

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Company generally does not invest in securities that are rated less than investment grade by a nationally recognized statistical rating organization. Ohio law prescribes the kinds of investments an Ohio-chartered bank may make. Permitted investments include local, state, and federal government securities, mortgage-backed securities, and securities of federal government agencies. An Ohio-chartered bank also may invest up to 10% of its assets in corporate debt and equity securities, or a higher percentage in certain circumstances. Ohio law also limits to 15% of capital the amount an Ohio-chartered bank may invest in the securities of any one issuer, other than local, state, and federal government and federal government agency issuers and mortgage-backed securities issuers. These provisions have not been a material constraint upon The Middlefield Banking Company's investment activities.

All securities-related activity is reported to The Middlefield Banking Company's board of directors. General changes in investment strategy are required to be reviewed and approved by the board. Senior management can purchase and sell securities in accordance with The Middlefield Banking Company's stated investment policy.

Management determines the appropriate classification of securities at the time of purchase. At this time The Middlefield Banking Company has no securities that are classified as held to maturity. Securities to be held for indefinite periods and not intended to be held to maturity or on a long-term basis are classified as available for sale. Available-for-sale securities are reflected on the balance sheet at their fair value.

The following table exhibits the consolidated amortized cost and fair value of The Middlefield Banking Company's investment portfolio at September 30, 2016 and at December 31, 2013, 2014, and 2015:

| (Dollars in thousands) | Investment Portfolio Amortized Cost and Fair Value | | | | | |
|---|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| | At September 30, 2016 | | At December 31, | | | |
| | Amortized cost | Fair value | 2015 | | 2014 | |
| | | | Amortized cost | Fair value | Amortized cost | Fair value |
| Available for Sale: | | | | | | |
| U.S. Government agency securities | \$ 10,516 | \$ 10,863 | \$ 21,655 | \$ 21,629 | \$ 23,035 | \$ 22,896 |
| Obligations of states and political subdivisions: | | | | | | |
| Taxable | 1,616 | 1,802 | 1,989 | 2,123 | 2,953 | 3,179 |
| Tax-exempt | 81,829 | 85,723 | 91,940 | 95,167 | 91,916 | 95,166 |
| Mortgage-backed securities in government-sponsored entities | 20,939 | 21,380 | 24,480 | 24,524 | 29,150 | 29,391 |
| Private-label mortgage-backed securities | 1,927 | 2,068 | 2,079 | 2,263 | 2,672 | 2,919 |
| Equity securities in financial institutions | 750 | 1,218 | 750 | 814 | 750 | 783 |
| Total Investment Securities | \$ 117,577 | \$ 123,054 | \$ 142,893 | \$ 146,520 | \$ 150,476 | \$ 154,334 |

The contractual maturity of investment debt securities as of September 30, 2016 is as follows:

September 30, 2016

| | One year or less | | More than one to five years | | More than five to ten years | | More than ten years | | Total investment securities | | Fair value |
|---|------------------|---------------|-----------------------------|---------------|-----------------------------|---------------|---------------------|---------------|-----------------------------|---------------|-------------------|
| | Amortized cost | Average yield | Amortized cost | Average yield | Amortized cost | Average yield | Amortized cost | Average yield | Amortized cost | Average yield | |
| (Dollars in thousands) | | | | | | | | | | | |
| U.S. Government agency securities | | | \$ 2,000 | 1.38% | | | \$ 8,516 | 3.13% | \$ 10,516 | 2.80% | \$ 10,863 |
| Obligations of states and political subdivisions: | | | | | | | | | | | |
| Taxable | | | | | 1,616 | 5.24% | | | 1,616 | 5.24% | 1,802 |
| Tax-exempt ** | 2,842 | 4.10% | 7,057 | 3.67% | 11,055 | 3.74% | 60,875 | 3.22% | 81,829 | 3.36% | 85,723 |
| Mortgage-backed securities in government-sponsored entities | | | | | 244 | 3.11% | 20,695 | 2.28% | 20,939 | 2.29% | 21,380 |
| Private-label mortgage-backed securities | | | 76 | 5.53% | | | 1,851 | 4.41% | 1,927 | 4.46% | 2,068 |
| Total | \$ 2,842 | 4.10% | \$ 9,133 | 3.19% | \$ 12,915 | 3.92% | \$ 91,937 | 3.02% | \$ 116,827 | 3.16% | \$ 121,836 |

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Expected maturities of investment securities could differ from contractual maturities because the borrower, or issuer, could have the right to call or prepay obligations with or without call or prepayment penalties. The average yields in the above table are not calculated on a tax-equivalent basis.

As of September 30, 2016, The Middlefield Banking Company also held 18,872 shares of \$100 par value Federal Home Loan Bank of Cincinnati stock, which is a restricted security. FHLB stock represents an equity interest in the FHLB, but it does not have a readily determinable market value. The stock can be sold at its par value only, and only to the FHLB or to another member institution. Member institutions are required to maintain a minimum stock investment in the FHLB, based on total assets, total mortgages, and total mortgage-backed securities. The Middlefield Banking Company's minimum investment in FHLB stock at September 30, 2016 was \$1.9 million.

Sources of Funds *Deposit Accounts* Deposit accounts are a major source of funds for The Middlefield Banking Company. The Middlefield Banking Company offers a number of deposit products to attract both commercial and regular consumer checking and savings customers, including regular and money market savings accounts, NOW accounts, and a variety of fixed-maturity, fixed-rate certificates with maturities ranging from 3 to 60 months. These accounts earn interest at rates established by management based on competitive market factors and management's desire to increase certain types or maturities of deposit liabilities. The Middlefield Banking Company also provides travelers' checks, official checks, money orders, ATM services, and IRA accounts.

The following table shows on a consolidated basis the amount of time deposits of \$100,000 or more as of September 30, 2016, including certificates of deposit, by time remaining until maturity.

| (Dollar amounts in thousands) | Amount | Percent of Total |
|--------------------------------------|---------------|-------------------------|
| Within three months | 11,902 | 12.28% |
| Beyond three but within six months | 13,061 | 13.48% |
| Beyond six but within twelve months | 16,950 | 17.49% |
| Beyond one year | 55,011 | 56.76% |
| Total | 96,924 | 100.01% |

Borrowings Deposits and repayment of loan principal are The Middlefield Banking Company's primary sources of funds for lending activities and other general business purposes. However, when the supply of funds cannot satisfy the demand for loans or general business purposes, The Middlefield Banking Company's subsidiary bank can obtain funds from the FHLB of Cincinnati. Interest and principal are payable monthly, and the line of credit is secured by a pledge collateral agreement. At September 30, 2016, The Middlefield Banking Company had \$31.5 million of FHLB borrowings outstanding. The Middlefield Banking Company also has access to credit through the Federal Reserve Bank of Cleveland and other funding sources.

The outstanding balances and related information about short-term borrowings as of September 30, 2016 and December 31, 2015, which includes securities sold under agreements to repurchase, lines of credit with other banks and Federal Funds purchased are summarized on a consolidated basis as follows:

| (Dollar amounts in thousands) | 9/30/2016 | 12/31/2015 |
|---------------------------------------|------------------|-------------------|
| Balance at period-end | \$ 32,803 | \$ 35,825 |
| Average balance outstanding | 30,155 | 11,768 |
| Maximum month-end balance | 42,024 | 35,825 |
| Weighted-average rate at period-end | 0.46% | 1.65% |
| Weighted-average rate during the year | 1.48% | 1.37% |

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Personnel. As of September 30, 2016 The Middlefield Banking Company had 140 full-time equivalent employees. No employees are represented by a collective bargaining group. Management considers relations with employees to be excellent.

Supervision and Regulation. The following discussion of bank supervision and regulation is qualified in its entirety by reference to the statutory and regulatory provisions discussed. Changes in applicable law or in the policies of various regulatory authorities could materially affect the business and prospects of Middlefield. Middlefield is a bank holding company within the meaning of the Bank Holding Company Act of 1956. As such, Middlefield is subject to regulation, supervision, and examination by the Board of Governors of the Federal Reserve System, acting primarily through the Federal Reserve Bank of Cleveland. Middlefield is required to file annual reports and other information with the Federal Reserve. The Middlefield Banking Company subsidiary is an Ohio-chartered commercial bank. As a state-chartered, nonmember bank, The Middlefield Banking Company is primarily regulated by the FDIC and by the Ohio Division of Financial Institutions.

Middlefield and The Middlefield Banking Company are subject to federal banking laws, and Middlefield is also subject to Ohio bank law. These federal and state laws are intended to protect depositors, not stockholders. Federal and state laws applicable to holding companies and their financial institution subsidiaries regulate the range of permissible business activities, investments, reserves against deposits, capital levels, lending activities and practices, the nature and amount of collateral for loans, establishment of branches, mergers, dividends, and a variety of other important matters. The Middlefield Banking Company is subject to detailed, complex, and sometimes overlapping federal and state statutes and regulations affecting routine banking operations. These statutes and regulations include but are not limited to state usury and consumer credit laws, the Truth-in-Lending Act and Regulation Z, the Equal Credit Opportunity Act and Regulation B, the Fair Credit Reporting Act, the Truth in Savings Act, and the Community Reinvestment Act. The Middlefield Banking Company must comply with Federal Reserve Board regulations requiring depository institutions to maintain reserves against their transaction accounts (principally NOW and regular checking accounts). Because required reserves are commonly maintained in the form of vault cash or in a noninterest-bearing account (or pass-through account) at a Federal Reserve Bank, the effect of the reserve requirement is to reduce an institution's earning assets.

The Federal Reserve Board and the FDIC have extensive authority to prevent and to remedy unsafe and unsound practices and violations of applicable laws and regulations by institutions and holding companies. The agencies may assess civil money penalties, issue cease-and-desist or removal orders, seek injunctions, and publicly disclose those actions. In addition, the Ohio Division of Financial Institutions possesses enforcement powers to address violations of Ohio banking law by Ohio-chartered banks.

Regulation of Bank Holding Companies *Bank and Bank Holding Company Acquisitions* The Bank Holding Company Act requires every bank holding company to obtain approval of the Federal Reserve before

directly or indirectly acquiring ownership or control of any voting shares of another bank or bank holding company, if after the acquisition the acquiring company would own or control more than 5% of the shares of the other bank or bank holding company (unless the acquiring company already owns or controls a majority of the shares),

acquiring all or substantially all of the assets of another bank, or

merging or consolidating with another bank holding company.

The Federal Reserve will not approve an acquisition, merger, or consolidation that would have a substantially anticompetitive result, unless the anticompetitive effects of the proposed transaction are clearly outweighed by a greater public interest in satisfying the convenience and needs of the community to be served. The Federal Reserve also considers capital adequacy and other financial and managerial factors and the record of performance under the Community Reinvestment Act in its review of acquisitions and mergers.

Additionally, the Bank Holding Company Act, the Change in Bank Control Act and the Federal Reserve Board's Regulation Y require advance approval of the Federal Reserve to acquire control of a bank holding

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company. Control is conclusively presumed to exist if an individual or company acquires 25% or more of a class of voting securities. If the holding company has securities registered under Section 12 of the Securities Exchange Act of 1934, as Middlefield does, or if no other person owns a greater percentage of the class of voting securities, control is presumed to exist if a person acquires 10% or more, but less than 25%, of any class of voting securities. Approval of the Ohio Division of Financial Institutions is also necessary to acquire control of an Ohio-chartered bank.

Nonbanking Activities With some exceptions, the Bank Holding Company Act generally prohibits a bank holding company from acquiring or retaining direct or indirect ownership or control of more than 5% of the voting shares of any company that is not a bank or bank holding company, or from engaging directly or indirectly in activities other than those of banking, managing or controlling banks, or providing services for its subsidiaries. The principal exceptions to these prohibitions involve nonbank activities that, by statute or by Federal Reserve Board regulation or order, are held to be closely related to the business of banking or of managing or controlling banks. In making its determination that a particular activity is closely related to the business of banking, the Federal Reserve considers whether the performance of the activities by a bank holding company can be expected to produce benefits to the public such as greater convenience, increased competition, or gains in efficiency in resources that will outweigh the risks of possible adverse effects such as decreased or unfair competition, conflicts of interest, or unsound banking practices. Some of the activities determined by Federal Reserve Board regulation to be closely related to the business of banking are: making or servicing loans or leases; engaging in insurance and discount brokerage activities; owning thrift institutions; performing data processing services; acting as a fiduciary or investment or financial advisor; and making investments in corporations or projects designed primarily to promote community welfare.

Financial Holding Companies On November 12, 1999 the Gramm-Leach-Bliley Act became law, repealing much of the 1933 Glass-Steagall Act's separation of the commercial and investment banking industries. The Gramm-Leach-Bliley Act expands the range of nonbanking activities a bank holding company may engage in, while preserving existing authority for bank holding companies to engage in activities that are closely related to banking. The new legislation creates a new category of holding company called a financial holding company. Financial holding companies may engage in any activity that is

financial in nature or incidental to that financial activity, or

complementary to a financial activity and that does not pose a substantial risk to the safety and soundness of depository institutions or the financial system generally.

Activities that are financial in nature include

acting as principal, agent, or broker for insurance,

underwriting, dealing in, or making a market in securities, and

providing financial and investment advice.

The Federal Reserve Board and the Secretary of the Treasury have authority to decide that other activities are also financial in nature or incidental to financial activity, taking into account changes in technology, changes in the

banking marketplace, competition for banking services, and so on. Middlefield is engaged solely in activities that were permissible for a bank holding company before enactment of the Gramm-Leach-Bliley Act. Federal Reserve Board rules require that all of the depository institution subsidiaries of a financial holding company be and remain well capitalized and well managed. If all depository institution subsidiaries of a financial holding company do not remain well capitalized and well managed, the financial holding company must enter into an agreement acceptable to the Federal Reserve Board, undertaking to comply with all capital and management requirements within 180 days. In the meantime the financial holding company may not use its expanded authority to engage in nonbanking activities without Federal Reserve Board approval and the Federal Reserve may impose other limitations on the holding company's or affiliates' activities. If a financial holding company fails to restore the well-capitalized and well-managed status of a depository institution subsidiary, the Federal Reserve may order divestiture of the subsidiary.

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Holding Company Capital and Source of Strength The Federal Reserve considers the adequacy of a bank holding company's capital on essentially the same risk-adjusted basis as capital adequacy is determined by the FDIC at the bank subsidiary level. The Federal Deposit Insurance Act requires that bank holding companies serve as a source of strength for their subsidiary banking institutions.

Under Bank Holding Company Act section 5(e), the Federal Reserve Board may require a bank holding company to terminate any activity or relinquish control of a nonbank subsidiary if the Federal Reserve Board determines that the activity or control constitutes a serious risk to the financial safety, soundness or stability of a subsidiary bank. And with the Federal Deposit Insurance Corporation Improvement Act of 1991's addition of the prompt corrective action provisions to the Federal Deposit Insurance Act, section 38(f)(2)(I) of the Federal Deposit Insurance Act now provides that a federal bank regulatory authority may require a bank holding company to divest itself of an undercapitalized bank subsidiary if the agency determines that divestiture will improve the subsidiary bank's financial condition and prospects.

Capital *Risk-Based Capital Requirements* The Federal Reserve Board and the FDIC employ similar risk-based capital guidelines in their examination and regulation of bank holding companies and financial institutions. If capital falls below the minimum levels established by the guidelines, the holding company or bank may be denied approval to acquire or establish additional banks or nonbank businesses or to open new facilities. Failure to satisfy capital guidelines could subject a banking institution to a variety of restrictions or enforcement actions by federal bank regulatory authorities, including the termination of deposit insurance by the FDIC and a prohibition on the acceptance of brokered deposits.

A bank's capital hedges its risk exposure, absorbing losses that can be predicted as well as losses that cannot be predicted. According to the Federal Financial Institutions Examination Council's explanation of the capital component of the Uniform Financial Institutions Rating System, commonly known as the CAMELS rating system, a rating system employed by the Federal bank regulatory agencies, a financial institution must maintain capital commensurate with the nature and extent of risks to the institution and the ability of management to identify, measure, monitor, and control these risks. The effect of credit, market, and other risks on the institution's financial condition should be considered when evaluating the adequacy of capital. Under Basel III, a community bank such as The Middlefield Banking Company is required to maintain a minimum common equity Tier 1 capital ratio of 4.5%, a Tier 1 capital ratio of 6%, a total capital ratio of 8%, and a Tier 1 leverage ratio of 4%. Basel III also established a capital conservation buffer of 2.5% above the new regulatory minimum capital requirements, which must consist entirely of common equity Tier 1 capital and will be phased in beginning in January 2016 at 0.625% of risk-weighted assets and increase by that amount each year until fully implemented in January 2019. The capital conservation buffer is designed to absorb losses during periods of economic stress. Banking institutions that fail to maintain the capital conservation buffer will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall. These ratios are absolute minimums. In practice, banks are expected to operate with more than the absolute minimum capital. The FDIC may establish greater minimum capital requirements for specific institutions.

The FDIC also employs a market risk component in its calculation of capital requirements for nonmember banks. The market risk component could require additional capital for general or specific market risk of trading portfolios of debt and equity securities and other investments or assets. The FDIC's evaluation of an institution's capital adequacy takes account of a variety of other factors as well, including interest rate risks to which the institution is subject, the level and quality of an institution's earnings, loan and investment portfolio characteristics and risks, risks arising from the conduct of nontraditional activities, and a variety of other factors.

Accordingly, the FDIC's final supervisory judgment concerning an institution's capital adequacy could differ significantly from the conclusions that might be derived from the absolute level of an institution's risk-based capital

ratios. Therefore, institutions generally are expected to maintain risk-based capital ratios that exceed the minimum ratios discussed above. This is particularly true for institutions contemplating significant expansion plans and institutions that are subject to high or inordinate levels of risk. Moreover, although the FDIC

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does not impose explicit capital requirements on holding companies of institutions regulated by the FDIC, the FDIC can take account of the degree of leverage and risks at the holding company level. If the FDIC determines that the holding company (or another affiliate of the institution regulated by the FDIC) has an excessive degree of leverage or is subject to inordinate risks, the FDIC may require the subsidiary institution(s) to maintain additional capital or the FDIC may impose limitations on the subsidiary institution's ability to support its weaker affiliates or holding company.

At December 31, 2015 and September 30, 2016, Middlefield and The Middlefield Banking Company were in compliance with all regulatory capital requirements.

Prompt Corrective Action. To resolve the problems of undercapitalized institutions and to prevent a recurrence of savings and loan crisis of the 1980s and early 1990s, the Federal Deposit Insurance Corporation Improvement Act of 1991 established a system known as prompt corrective action. Under the prompt corrective action provisions and implementing regulations, every institution is classified into one of five categories, depending on its total risk-based capital ratio, its common equity Tier 1 ratio, its Tier 1 risk-based capital ratio, its leverage ratio, and subjective factors. The categories are well capitalized, adequately capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized. To be considered well capitalized for purposes of the prompt corrective action rules, a bank must maintain total risk-based capital of 10.0% or greater, Tier 1 risk-based capital of 8.0% or greater, common equity Tier 1 capital of 6.5%, and a leverage ratio of 5.0% or greater. An institution with a capital level that might qualify for well capitalized or adequately capitalized status may nevertheless be treated as though it were in the next lower capital category if its primary federal banking supervisory authority determines that an unsafe or unsound condition or practice warrants that treatment.

A financial institution's operations can be significantly affected by its capital classification under the prompt corrective action rules. For example, an institution that is not well capitalized generally is prohibited from accepting brokered deposits and offering interest rates on deposits higher than the prevailing rate in its market without advance regulatory approval, which can have an adverse effect on the bank's liquidity. At each successively lower capital category, an insured depository institution is subject to additional restrictions. Undercapitalized institutions are required to take specified actions to increase their capital or otherwise decrease the risks to the federal deposit insurance funds. A bank holding company must guarantee that a subsidiary bank that adopts a capital restoration plan will satisfy its plan obligations. Any capital loans made by a bank holding company to a subsidiary bank are subordinated to the claims of depositors in the subsidiary bank and to certain other indebtedness of the subsidiary bank. If bankruptcy of a bank holding company occurs, any commitment by the holding company to a Federal banking regulatory agency to maintain the capital of a subsidiary bank would be assumed by bankruptcy trustee and would be entitled to priority of payment. Bank regulatory agencies generally are required to appoint a receiver or conservator shortly after an institution becomes critically undercapitalized.

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The Middlefield Banking Company met each of the well-capitalized ratio guidelines at September 30, 2016. The following table indicates the capital ratios for The Middlefield Banking Company and Middlefield at September 30, 2016 and December 31, 2015. The capital conservation buffer is being phased in from 0.625% for 2016 to 2.50% by 2019. The amounts shown below as the adequately capitalized ratio plus capital conservation buffer includes the fully phased-in 2.50% buffer.

| | As of September 30, 2016 | | | |
|---|---------------------------------|--------------------------|-----------------------------|-------------------------|
| | Leverage | Tier 1 Risk Based | Common Equity Tier 1 | Total Risk Based |
| The Middlefield Banking Company | 9.02% | 11.92% | 11.92% | 13.03% |
| Middlefield Banc Corp. | 10.10% | 13.58% | 13.58% | 14.69% |
| Adequately capitalized ratio | 4.00% | 6.00% | 4.50% | 8.00% |
| Adequately capitalized ratio plus capital conservation buffer | 4.00% | 8.50% | 7.00% | 10.50% |
| Well-capitalized ratio (Bank only) | 5.00% | 8.00% | 6.50% | 10.00% |

| | As of December 31, 2015 | | | |
|---|--------------------------------|--------------------------|-----------------------------|-------------------------|
| | Leverage | Tier 1 Risk Based | Common Equity Tier 1 | Total Risk Based |
| The Middlefield Banking Company | 9.23% | 12.52% | 12.52% | 13.73% |
| Middlefield Banc Corp. | 8.69% | 12.00% | 12.00% | 13.20% |
| Adequately capitalized ratio | 4.00% | 6.00% | 4.50% | 8.00% |
| Adequately capitalized ratio plus capital conservation buffer | 4.00% | 8.50% | 7.00% | 10.50% |
| Well-capitalized ratio (Bank only) | 5.00% | 8.00% | 6.50% | 10.00% |

New Capital Rules On July 9, 2013, the federal bank regulatory agencies issued a final rule that will revise their risk-based capital requirements and the method for calculating risk-weighted assets to make them consistent with agreements that were reached by the Basel Committee on Banking Supervision and certain provisions of the Dodd-Frank Act. The final rule applies to all depository institutions, top-tier bank holding companies with total consolidated assets of \$1.0 billion or more and top-tier savings and loan holding companies. The rule establishes a new common equity Tier 1 minimum capital requirement (4.5% of risk-weighted assets), increases the minimum Tier 1 capital to risk-based assets requirement (from 4.0% to 6.0% of risk-weighted assets) and assigns a higher risk weight (150%) to exposures that are more than 90 days past due or are on nonaccrual status and to certain commercial real estate facilities that finance the acquisition, development or construction of real property.

The rule also includes changes in what constitutes regulatory capital, some of which are subject to a two-year transition period. These changes include the phasing-out of certain instruments as qualifying capital. In addition, Tier 2 capital is no longer limited to the amount of Tier 1 capital included in total capital. Mortgage servicing rights, certain deferred tax assets and investments in unconsolidated subsidiaries over designated percentages of common stock will be required to be deducted from capital, subject to a two-year transition period. Finally, Tier 1 capital will include accumulated other comprehensive income (which includes all unrealized gains and losses on available-for-sale debt and equity securities), subject to a two-year transition period. In the first quarter of 2015 Middlefield permanently opted out of the inclusion of accumulated other comprehensive income in its capital calculation in an effort to reduce the impact of market volatility on its regulatory capital levels.

The new capital requirements also include changes in the risk-weights of assets to better reflect credit risk and other risk exposures. These include a 150% risk weight (up from 100%) for certain high volatility commercial real estate acquisition, development and construction loans and nonresidential mortgage loans that are 90 day past due or otherwise on nonaccrual status; a 20% (up from 0%) credit conversion factor for the unused portion of a commitment with an original maturity of one year or less that is not unconditionally cancellable; a 250% risk weight (up from 100%) for mortgage servicing and deferred tax assets that are not deducted from capital; and increased risk-weights (from 0% to up to 600%) for equity exposures.

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Finally, the rule limits capital distributions and certain discretionary bonus payments if the bank does not hold a capital conservation buffer consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets in addition to the amount necessary to meet its minimum risk-based capital requirements.

The final rule became effective for The Middlefield Banking Company on January 1, 2015. The capital conservation buffer requirement will be phased in beginning January 1, 2016 at 0.625% of risk-weighted assets increasing each year until fully implemented at 2.5% on January 1, 2019.

Limits on Dividends and Other Payments Middlefield's ability to obtain funds for the payment of dividends and for other cash requirements depends on the amount of dividends that may be paid to it by The Middlefield Banking Company. Ohio bank law and FDIC policy are consistent, providing that banks generally may rely solely on current earnings for the payment of dividends. Under Ohio Revised Code section 1107.15(B) a dividend may be declared from surplus, meaning additional paid-in capital, with the approval of (x) the Ohio Superintendent of Financial Institutions and (y) the holders of two thirds of the bank's outstanding shares. Superintendent approval is also necessary for payment of a dividend if the total of all cash dividends in a year exceeds the sum of (x) net income for the year and (y) retained net income for the two preceding years. Relying on 12 U.S.C. 1818(b), the FDIC may restrict a bank's ability to pay a dividend if the FDIC has reasonable cause to believe that the dividend would constitute an unsafe and unsound practice. A bank's ability to pay dividends may be affected also by the FDIC's capital maintenance requirements and prompt corrective action rules. A bank may not pay a dividend if the bank is undercapitalized or if payment would cause the bank to become undercapitalized.

A 1985 policy statement of the Federal Reserve Board declares that a bank holding company should not pay cash dividends on common stock unless the organization's net income for the past year is sufficient to fully fund the dividends and the prospective rate of earnings retention appears consistent with the organization's capital needs, asset quality, and overall financial condition. Until the third anniversary of the January 20, 2014 merger of Emerald Bank into The Middlefield Banking Company, The Middlefield Banking Company cannot pay a dividend to Middlefield Banc Corp. without advance approval of the Ohio Division of Financial Institutions.

The Dodd-Frank Act The Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA) became law on July 21, 2010. The DFA includes corporate governance and executive compensation reforms, new registration requirements for hedge fund and private equity fund advisers, increased regulation of over-the-counter derivatives and asset-backed securities, and new rules for credit rating agencies. The DFA includes these provisions

Title X establishes an independent Federal regulatory body within the Federal Reserve System. Dedicated exclusively to consumer protection and known as the Consumer Financial Protection Bureau, this regulatory body has responsibility for most consumer protection laws, with rulemaking, supervisory, examination, and enforcement authority.

section 171 restricts the amount of trust preferred securities that may be considered Tier 1 capital. For depository institution holding companies with total assets of less than \$15 billion, trust preferred securities issued before May 19, 2010 may continue to be included in Tier 1 capital, but future issuances of trust preferred securities will no longer be eligible for treatment as Tier 1 capital.

under section 334 the FDIC's minimum reserve ratio is to be increased from 1.15% to 1.35%, with the goal of attaining that 1.35% level by September 30, 2020; however, financial institutions with assets of less than \$10 billion are exempt from the cost of the increase. The DFA also removes the upper limit on the designated reserve ratio, which was formerly capped at 1.5%, removing the upper limit on the size of the insurance fund as a consequence. The DFA gives the FDIC much greater discretion to manage its insurance fund reserves, including where to set the insurance fund's designated reserve ratio.

the deposit insurance cover limit is increased to \$250,000 by section 335.

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section 627 repeals the longstanding prohibition against financial institutions paying interest on checking accounts.

section 331 changes the way deposit insurance premiums are calculated by the FDIC as well. That is, deposit insurance premiums are calculated based upon an institution's so-called assessment base. Until the DFA became law, the assessment base consisted of an institution's deposit liabilities. Section 331, however, makes clear that the assessment base shall now be the difference between total assets and tangible equity. In other words, the assessment base will take account of all liabilities, not merely deposit liabilities. This change is likely to have a greater impact on large banks, which tend to rely on a variety of funding sources, than on community banks, which tend to rely primarily on deposit funding.

the Office of the Comptroller of the Currency's ability to preempt state consumer protection laws is constrained by section 1044, and because of section 1042 state attorneys general have greater authority to enforce state consumer protection laws against national banks and their operating subsidiaries.

section 604 requires the Federal bank regulatory agencies to take into account the risks to the stability of the U.S. banking or financial system associated with approval of an application for acquisition of a bank, for acquisition of a nonbank company, or for a bank merger transaction.

section 619 implements the so-called Volcker rule, prohibiting a banking entity from engaging in proprietary trading or from sponsoring or investing in a hedge fund or private equity fund.

imposing a 5% risk retention requirement on securitizers of asset-backed securities, section 941 could have an impact on financial institutions that originate mortgages for sale into the secondary market.

The DFA creates a new, independent federal agency called the Consumer Financial Protection Bureau (CFPB), which has rulemaking, supervisory, and enforcement powers under specific federal consumer financial protection laws, including the Equal Credit Opportunity Act, Truth in Lending Act, Real Estate Settlement Procedures Act, Fair Credit Reporting Act, Fair Debt Collection Act, and Consumer Financial Privacy provisions of the Gramm-Leach-Bliley Act. In addition to giving the CFPB responsibility for these specific statutes, the DFA grants to the CFPB broad authority to prohibit the offering by banks of consumer financial products or engaging in acts or practices that the CFPB considers to be unfair, deceptive, or abusive. The CFPB has examination and primary enforcement authority over depository institutions with \$10 billion or more in assets, not smaller institutions. However, smaller institutions are subject to CFPB rules. In addition, the standards established by the CFPB for large institutions are likely to be applied in practice to smaller institutions as well. The DFA does not prevent states from adopting consumer protection laws and standards that are more stringent than those adopted at the federal level and, in certain circumstances, permits state attorneys general to enforce compliance with both the state and federal laws and regulations.

Implementing section 1411 of the DFA, in 2013 the CFPB amended Regulation Z under the Truth in Lending Act, adding a rule that mortgage lenders must make a reasonable and good faith determination that a consumer being granted mortgage credit has the ability to repay the loan according to its terms. Under this new rule, referred to as the ability-to-repay rule, mortgage lenders may determine the consumer's ability to repay in one of two ways. The first alternative involves assessment of eight underwriting factors, including the loan applicant's current or reasonably expected income or assets, current employment status, monthly payment for the credit applied for, monthly payment

on any simultaneous loan being made to the applicant, monthly payment for mortgage-related obligations, current debt obligations, alimony, and child support, monthly debt-to-income ratio or residual income, and credit history. The second alternative involves origination of a so-called qualified mortgage, meaning a mortgage with terms that are consistent with minimum standards established by the CFPB, which currently include a maximum 43% debt-to-income ratio for the borrower (although the 43% minimum debt-to-income ratio does not apply if the loan is eligible to be purchased, insured, or guaranteed by FNMA, FHLMC, HUD, or the VA). In general terms, a qualified mortgage is one with a term of 30 years or less, with substantially equal regular periodic payments (although adjustable-rate mortgages can be qualified mortgages), with total points and fees of 3% of the loan amount or less, and without negative amortization or interest-only payments or balloon payments.

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A lender originating a qualified mortgage is protected against a legal claim that the lender failed to comply with the ability-to-repay rule. A mortgage with an interest rate exceeding the prime rate by 1.5 percentage points or more (3.5 percentage points for subordinate-lien loans such as home equity loans) is referred to in the CFPB rule as a higher-priced mortgage loan, but is more commonly known as a subprime loan. A subprime loan can be a qualified mortgage, but the lender making a subprime qualified mortgage has less protection under the ability-to-repay rule than a lender making a prime qualified mortgage. A lender originating a mortgage that is not a qualified mortgage is exposed to a potential claim that the lender did not comply with the ability-to-repay rules, which could require the lender to pay damages to the borrower, including but not necessarily limited to the sum of all finance charges and fees paid by the borrower (a lender originating a subprime qualified mortgage bears this risk to a degree as well). The borrower's claim also could impair the lender's ability to enforce the loan terms or foreclose on the real estate collateral. Because of these potential risks, a qualified mortgage might have more value in the secondary mortgage market and might be easier for a lender to sell into the secondary mortgage market than a mortgage that is not a qualified mortgage.

Although we believe the majority of our mortgage originations will be qualified mortgages, the ability-to-repay rule creates a new basis for challenge by regulators and by consumers. In addition, the CFPB's mission is consumer protection, not lender safety and soundness, and for that reason the CFPB wrote the ability-to-repay rule with the goal of preventing consumers from being steered by lenders into expensive and unsustainable borrowing, rather than with the goal of assuring actual loan repayment. Accordingly, typical credit-quality features such as LTV standards are not part of the ability-to-repay rule, and it will not necessarily be the case that qualified mortgages have a higher probability or history of repayment than other mortgages. Compliance with the ability-to-repay rules has increased community banks' compliance costs, including our own, and will potentially adversely affect the profitability of routine residential mortgage lending. In addition, for the mortgage lending industry the ability-to-repay rule creates a bias in favor of qualified mortgages, which because of factors such as a minimum 43% debt-to-income ratio could have unintended adverse effects, such as reducing community bank lending to low- and moderate-income borrowers and communities.

In addition to ability to repay, the DFA imposes a risk-retention requirement on mortgage lenders selling loans into the secondary mortgage market. With some exceptions, a mortgage lender selling a loan into the secondary mortgage market must retain not less than 5% of the credit risk associated with the loan, the assumption being that if mortgage lenders remain exposed to credit risk they will not knowingly make loans that fail to satisfy ordinary and reasonable standards of creditworthiness. A qualified mortgage for purposes of the ability-to-repay rule is also exempt from the risk-retention requirement, allowing a mortgage lender to sell 100% of a qualified mortgage rather than only 95%. The exemption of qualified mortgages from the risk-retention requirement is likely to contribute to the regulatory bias in favor of qualified mortgages and against other forms of mortgage lending.

Sarbanes-Oxley Act of 2002 The goals of the Sarbanes-Oxley Act enacted in 2002 are to increase corporate responsibility, to provide for enhanced penalties for accounting and auditing improprieties at publicly traded companies, and to protect investors by improving the accuracy and reliability of corporate disclosures made under the securities laws. The changes are intended to allow shareholders to monitor the performance of companies and directors more easily and efficiently.

The Sarbanes-Oxley Act generally applies to all companies that file periodic reports with the SEC under the Securities Exchange Act of 1934. The Act has an impact on a wide variety of corporate governance and disclosure issues, including the composition of audit committees, certification of financial statements by the chief executive officer and the chief financial officer, forfeiture of bonuses and profits made by directors and senior officers in the 12-month period covered by restated financial statements, a prohibition on insider trading during pension plan black-out periods, disclosure of off-balance sheet transactions, a prohibition on personal loans to directors and officers (excluding

Federally insured financial institutions), expedited filing requirements for stock transaction reports by officers and directors, the formation of a public accounting oversight board, auditor independence, and various increased criminal penalties for violations of securities laws.

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Deposit Insurance The premium that banks pay for deposit insurance is based upon a risk classification system established by the FDIC. Banks with higher levels of capital and a low degree of supervisory concern are assessed lower premiums than banks with lower levels of capital or a higher degree of supervisory concern.

Interstate Banking and Branching Section 613 of the DFA amends the interstate branching provisions of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. The expanded *de novo* branching authority of the DFA authorizes a state or national bank to open a *de novo* branch in another state if the law of the state where the branch is to be located would permit a state bank chartered by that state to open the branch. Section 607 of the DFA also increases the approval threshold for interstate bank acquisitions, providing that a bank holding company must be well capitalized and well managed as a condition to approval of an interstate bank acquisition, rather than being merely adequately capitalized and adequately managed, and that an acquiring bank must be and remain well capitalized and well managed as a condition to approval of an interstate bank merger.

Transactions with Affiliates Although The Middlefield Banking Company is not a member bank of the Federal Reserve System, it is required by the Federal Deposit Insurance Act to comply with section 23A and section 23B of the Federal Reserve Act pertaining to transactions with affiliates as if it were a member bank. These statutes are intended to protect banks from abuse in financial transactions with affiliates, preventing federally insured deposits from being diverted to support the activities of unregulated entities engaged in nonbanking businesses. An affiliate of a bank includes any company or entity that controls or is under common control with the bank. Generally, section 23A and section 23B of the Federal Reserve Act

limit the extent to which a bank or its subsidiaries may lend to or engage in various other kinds of transactions with any one affiliate to an amount equal to 10% of the institution's capital and surplus, limiting the aggregate of covered transactions with all affiliates to 20% of capital and surplus,

impose restrictions on investments by a subsidiary bank in the stock or securities of its holding company,

require that affiliate transactions be on terms substantially the same, or at least as favorable to the institution or subsidiary, as those provided to a non-affiliate, and

impose strict collateral requirements on loans or extensions of credit by a bank to an affiliate

The Middlefield Banking Company's authority to extend credit to insiders meaning executive officers, directors and greater than 10% stockholders or to entities those persons control, is subject to section 22(g) and section 22(h) of the Federal Reserve Act and Regulation O of the Federal Reserve Board. Among other things, these laws require insider loans to be made on terms substantially similar to those offered to unaffiliated individuals, place limits on the amount of loans a bank may make to insiders based in part on the bank's capital position, and require that specified approval procedures be followed. Loans to an individual insider may not exceed the legal limit on loans to any one borrower, which in general terms is 15% of capital but can be higher in some circumstances. And the aggregate of all loans to all insiders may not exceed the bank's unimpaired capital and surplus. Insider loans exceeding the greater of 5% of capital or \$25,000 must be approved in advance by a majority of the board, with any interested director not participating in the voting. Lastly, loans to executive officers are subject to special limitations. Executive officers may borrow in unlimited amounts to finance their children's education or to finance the purchase or improvement of their residence, and they may borrow no more than \$100,000 for most other purposes. Loans to executive officers exceeding \$100,000

may be allowed if the loan is fully secured by government securities or a segregated deposit account. A violation of these restrictions could result in the assessment of substantial civil monetary penalties, the imposition of a cease-and-desist order or other regulatory sanctions.

Banking agency guidance for commercial real estate lending In December 2006 the FDIC and other Federal banking agencies issued final guidance on sound risk management practices for concentrations in commercial real estate lending, including acquisition and development lending, construction lending, and other land loans, which recent experience has shown can be particularly high-risk lending.

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The commercial real estate risk management guidance does not impose rigid limits on commercial real estate lending but does create a much sharper supervisory focus on the risk management practices of banks with concentrations in commercial real estate lending. According to the guidance, an institution that has experienced rapid growth in commercial real estate lending, has notable exposure to a specific type of commercial real estate, or is approaching or exceeds the following supervisory criteria may be identified for further supervisory analysis of the level and nature of its commercial real estate concentration risk

total reported loans for construction, land development, and other land represent 100% or more of the institution's total capital, or

total commercial real estate loans represent 300% or more of the institution's total capital and the outstanding balance of the institution's commercial real estate loan portfolio has increased by 50% or more during the prior 36 months.

These measures are intended merely to enable the bank regulatory agencies to quickly identify institutions that could have an excessive commercial real estate lending concentration, potentially requiring close supervision to ensure that the institutions have sound risk management practices in place. Conversely, these measures do not imply that banks are authorized by the December 2006 guidance to accumulate a commercial real estate lending concentration up to the 100% and 300% thresholds.

Corporate Governance and Compensation The Federal banking agencies jointly published their final Guidance on Sound Incentive Compensation Policies in June of 2010. The goal of the guidance is to enable financial organizations to manage the safety and soundness risks of incentive compensation arrangements and to assist banks and bank holding companies with identification of improperly-structured compensation arrangements. To ensure that incentive compensation arrangements do not encourage employees to take excessive risks that undermine safety and soundness, the incentive compensation guidance sets forth these key principles

incentive compensation arrangements should provide employees incentives that appropriately balance risk and financial results in a manner that does not encourage employees to expose the organization to imprudent risk,

these arrangements should be compatible with effective controls and risk management, and

these arrangements should be supported by strong corporate governance, including active and effective oversight by the board of directors.

To implement the interagency guidance, a financial organization must regularly review incentive compensation arrangements for all executive and non-executive employees who, either individually or as part of a group, have the ability to expose the organization to material amounts of risk, also reviewing the risk-management, control, and corporate governance processes related to these arrangements. The organization must immediately correct any identified deficiencies in compensation arrangements or processes that are inconsistent with safety and soundness.

In addition to numerous provisions that affect the business of banks and bank holding companies, the DFA includes in Title IX a number of provisions affecting corporate governance and executive compensation, for example the requirements that stockholders be given the opportunity to consider and vote upon executive compensation disclosed in a company's annual meeting proxy statement, that a company's compensation committee be comprised entirely of independent directors and that the committee have stated minimum authorities, that company policy provide for recovery of excess incentive compensation after an accounting restatement, and that stockholders have the ability to designate director nominees for inclusion in a company's annual meeting proxy statement. Section 956 also provides for adoption of incentive compensation guidelines jointly by the Federal banking agencies and the SEC, the National Credit Union Administration, and the Federal Housing Finance Agency.

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Community Reinvestment Act Under the Community Reinvestment Act of 1977 and implementing regulations of the banking agencies, a financial institution has a continuing and affirmative obligation consistent with safe and sound operation to address the credit needs of its entire community, including low- and moderate-income neighborhoods. The CRA does not establish specific lending requirements or programs for financial institutions, nor does it limit an institution's discretion to develop the types of products and services it believes are best suited to its particular community. The CRA requires that bank regulatory agencies conduct regular CRA examinations and provide written evaluations of institutions' CRA performance. The CRA also requires that an institution's CRA performance rating be made public. CRA performance evaluations are based on a four-tiered rating system: Outstanding, Satisfactory, Needs to Improve and Substantial Noncompliance.

Although CRA examinations occur on a regular basis, CRA performance evaluations have been used principally in the evaluation of regulatory applications submitted by an institution. CRA performance evaluations are considered in evaluating applications for such things as mergers, acquisitions, and applications to open branches.

The Middlefield Banking Company's CRA performance evaluation dated December 2, 2013 assigns a CRA rating of Satisfactory.

Federal Home Loan Bank The Federal Home Loan Bank serves as a credit source for their members. As a member of the FHLB of Cincinnati, The Middlefield Banking Company must maintain an investment in the capital stock of the FHLB of Cincinnati in an amount calculated by reference to the amount of loans, and or advances, from the FHLB. Each FHLB is required to establish standards of community investment or service that its members must maintain for continued access to long-term advances from the FHLB. The standards take into account a member's performance under the Community Reinvestment Act and its record of lending to first-time home buyers.

Anti-money laundering and anti-terrorism legislation The Bank Secrecy Act of 1970 requires financial institutions to maintain records and report transactions to prevent the financial institutions from being used to hide money derived from criminal activity and tax evasion. The Bank Secrecy Act establishes (a) record keeping requirements to assist government enforcement agencies with tracing financial transactions and flow of funds, (b) reporting requirements for Suspicious Activity Reports and Currency Transaction Reports to assist government enforcement agencies with detecting patterns of criminal activity, (c) enforcement provisions authorizing criminal and civil penalties for illegal activities and violations of the Bank Secrecy Act and its implementing regulations, and (d) safe harbor provisions that protect financial institutions from civil liability for their cooperative efforts.

The Treasury's Office of Foreign Asset Control administers and enforces economic and trade sanctions against targeted foreign countries, entities, and individuals based on U.S. foreign policy and national security goals. As a result, financial institutions must scrutinize transactions to ensure that they do not represent obligations of or ownership interests in entities owned or controlled by sanctioned targets.

Signed into law on October 26, 2001, the USA PATRIOT Act of 2001 is omnibus legislation enhancing the powers of domestic law enforcement organizations to resist the international terrorist threat to United States security. Title III of the legislation, the International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001, most directly affects the financial services industry, enhancing the Federal government's ability to fight money laundering through monitoring of currency transactions and suspicious financial activities. The Act has significant implications for depository institutions and other businesses involved in the transfer of money

a financial institution must establish due diligence policies, procedures, and controls reasonably designed to detect and report money laundering through correspondent accounts and private banking accounts,

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no bank may establish, maintain, administer, or manage a correspondent account in the United States for a foreign shell bank,

financial institutions must abide by Treasury Department regulations encouraging financial institutions, their regulatory authorities, and law enforcement authorities to share information about individuals, entities, and organizations engaged in or suspected of engaging in terrorist acts or money laundering activities,

financial institutions must follow Treasury Department regulations setting forth minimum standards regarding customer identification. These regulations require financial institutions to implement reasonable procedures for verifying the identity of any person seeking to open an account, maintain records of the information used to verify the person's identity, and consult lists of known or suspected terrorists and terrorist organizations provided to the financial institution by government agencies,

every financial institution must establish anti-money laundering programs, including the development of internal policies and procedures, designation of a compliance officer, employee training, and an independent audit function.

Consumer protection laws and regulations. The Middlefield Banking Company is subject to regular examination by the FDIC to ensure compliance with statutes and regulations applicable to The Middlefield Banking Company's business, including consumer protection statutes and implementing regulations, some of which are discussed below. Violations of any of these laws may result in fines, reimbursements, and other related penalties.

Equal Credit Opportunity Act. The Equal Credit Opportunity Act generally prohibits discrimination in any credit transaction, whether for consumer or business purposes, on the basis of race, color, religion, national origin, sex, marital status, age (except in limited circumstances), receipt of income from public assistance programs, or good faith exercise of any rights under the Consumer Credit Protection Act.

Truth in Lending Act. The Truth in Lending Act is designed to ensure that credit terms are disclosed in a meaningful way so that consumers may compare credit terms more readily and knowledgeably. As a result of the Truth in Lending Act, all creditors must use the same credit terminology to express rates and payments, including the annual percentage rate, the finance charge, the amount financed, the total of payments and the payment schedule, among other things.

Fair Housing Act. The Fair Housing Act makes it unlawful for a lender to discriminate against any person because of race, color, religion, national origin, sex, handicap, or familial status. A number of lending practices have been held by the courts to be illegal under the Fair Housing Act, including some practices that are not specifically mentioned in the Fair Housing Act.

Home Mortgage Disclosure Act. The Home Mortgage Disclosure Act arose out of public concern over credit shortages in certain urban neighborhoods. The Home Mortgage Disclosure Act requires financial institutions to collect data that enable regulatory agencies to determine whether the financial institutions are serving the housing credit needs of the neighborhoods and communities in which they are located. The Home Mortgage Disclosure Act also requires the collection and disclosure of data about applicant and borrower characteristics as a way to identify possible discriminatory lending patterns. The vast amount of information that financial institutions collect and disclose concerning applicants and borrowers receives attention not only from state and Federal banking supervisory authorities but also from community-oriented organizations and the general public.

Real Estate Settlement Procedures Act. The Real Estate Settlement Procedures Act requires that lenders provide borrowers with disclosures regarding the nature and cost of real estate settlements. The Real Estate Settlement Procedures Act also prohibits abusive practices that increase borrowers' costs, such as kickbacks and fee-splitting without providing settlement services.

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Privacy. Under the Gramm-Leach-Bliley Act, all financial institutions are required to establish policies and procedures to restrict the sharing of non-public customer data with non-affiliated parties and to protect customer data from unauthorized access. In addition, the Fair Credit Reporting Act of 1971 includes many provisions concerning national credit reporting standards and permits consumers to opt out of information-sharing for marketing purposes among affiliated companies.

State Banking Regulation As an Ohio-chartered bank, The Middlefield Banking Company is subject to regular examination by the Ohio Division of Financial Institutions. State banking regulation affects the internal organization of The Middlefield Banking Company as well as its savings, lending, investment, and other activities. State banking regulation may contain limitations on an institution's activities that are in addition to limitations imposed under federal banking law. The Ohio Division of Financial Institutions may initiate supervisory measures or formal enforcement actions, and if the grounds provided by law exist it may take possession and control of an Ohio-chartered bank.

Monetary Policy The earnings of financial institutions are affected by the policies of regulatory authorities, including monetary policy of the Federal Reserve Board. An important function of the Federal Reserve System is regulation of aggregate national credit and money supply. The Federal Reserve Board accomplishes these goals with measures such as open market transactions in securities, establishment of the discount rate on bank borrowings, and changes in reserve requirements against bank deposits. These methods are used in varying combinations to influence overall growth and distribution of financial institutions' loans, investments and deposits, and they also affect interest rates charged on loans or paid on deposits. Monetary policy is influenced by many factors, including inflation, unemployment, short-term and long-term changes in the international trade balance, and fiscal policies of the United States government. Federal Reserve Board monetary policy has had a significant effect on the operating results of financial institutions in the past, and it can be expected to influence operating results in the future.

Properties. The Middlefield Banking Company's offices are:

| Location | County | Owned / Leased | Other information |
|------------------------|---------------|---------------------------|--------------------------|
| Main Office: | Geauga | Owned | |
| 15985 East High Street | | | |
| Middlefield, Ohio | | | |
| Branches: | | | |
| West Branch | Geauga | Owned | |
| 15545 West High Street | | | |
| Middlefield, Ohio | | | |
| Garrettsville Branch | Portage | Owned | |
| 8058 State Street | | | |
| Garrettsville, Ohio | | | |

| | | | |
|-------------------------|-----------|--------|--|
| Mantua Branch | Portage | Leased | three-year lease renewed in November 2013, with option to renew for five additional consecutive three-year terms |
| 10519 South Main Street | | | |
| Mantua, Ohio | | | |
| Chardon Branch | Geauga | Owned | |
| 348 Center Street | | | |
| Chardon, Ohio | | | |
| Orwell Branch | Ashtabula | Owned | |
| 30 South Maple Avenue | | | |
| Orwell, Ohio | | | |

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| Location | County | Owned / Leased | Other information |
|--|---------------|---------------------------|--|
| Newbury Branch 11110 Kinsman Road Newbury, Ohio | Geauga | Leased | ten-year lease dated December 2006, with option to renew for four additional consecutive five-year terms |
| Cortland Branch 3450 Niles Cortland Road Cortland, Ohio | Trumbull | Owned | |
| Dublin Branch 6215 Perimeter Drive Dublin, Ohio | Franklin | Leased | twenty-year lease dated February 2004, with the option to purchase after the tenth year |
| Sunbury Branch 492 West Cherry Street Sunbury, Ohio | Delaware | Leased | five-year lease dated July 1, 2016, with two five-year renewal options |
| Westerville Branch 17 North State Street Westerville, Ohio | Franklin | Owned | |
| Administrative Offices 15200 Madison Road, Suite 108 Middlefield, Ohio 44062 | Geauga | Owned | |
| Mentor Loan Production Office 8353 Mentor Avenue Mentor, Ohio 44060 | Lake | Leased | one-year lease dated September 2015, with the option to renew for two additional one-year terms |

At September 30, 2016 the net book value of The Middlefield Banking Company's investment in premises and equipment totaled \$9.9 million.

Legal Proceedings. From time to time Middlefield and The Middlefield Banking Company are involved in various legal proceedings that are incidental to its business. In the opinion of management, no current legal proceedings are material to the financial condition of Middlefield or the subsidiary bank, either individually or in the aggregate.

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Voting Securities and Principal Holders. The following table shows the beneficial ownership of Middlefield common stock on November 17, 2016 on the part of each director, each executive officer identified in the Summary Compensation Table, and all directors and executive officers as a group. For purposes of the table, a person is considered to own beneficially any shares over which he or she exercises sole or shared voting or investment power or of which he or she has the right to acquire beneficial ownership within 60 days. Unless noted otherwise, voting power and investment power are exercised solely by the person named or they are shared with members of his or her household. The percentage figures are based on 2,250,893 shares outstanding, plus the number of shares each individual has the right to acquire within 60 days. The percentage ownership of each person identified in the table would be less than 1.0% if 45% of the 960,273 shares of Liberty Bank common stock outstanding are converted into Middlefield common stock at the exchange rate of 1.1934 shares of Middlefield common stock for each share of Liberty Bank common stock, resulting in issuance of 515,695 shares of Middlefield common stock. Middlefield is not aware of any person being owner of more than five percent of Middlefield common stock. To the best of Middlefield's knowledge no Liberty stockholder to whom Middlefield common stock will be issued in the merger will own more than five percent of Middlefield common stock as a result of issuance of shares in the merger.

| Directors, Director Nominees, and Named Executive Officers | Shares Beneficially Owned | Shares Acquirable Within 60 Days By Option Exercise(1) | Percent of Stock |
|--|--|---|---------------------------------|
| Thomas G. Caldwell, director, President & CEO | 14,574(2) | 5,525 | (6) |
| James R. Heslop, II, director, EVP and COO | 8,092 | 3,475 | (6) |
| Eric W. Hummel, director | 16,502 | 0 | (6) |
| Kenneth E. Jones, director | 7,764(3) | 2,837 | (6) |
| Darryl E. Mast, director | 6,828 | 0 | (6) |
| James J. McCaskey, director | 3,461(4) | 1,500 | (6) |
| Clayton W. Rose III, director | 2,870 | 1,500 | (6) |
| William J. Skidmore, director | 5,505 | 2,837 | (6) |
| Donald L. Stacy, CFO and Treasurer | 2,060 | 3,775 | (6) |
| Robert W. Toth, director | 25,371(5) | 1,500 | 1.19% |
| Carolyn J. Turk, director | 12,322 | 1,500 | (6) |
| other executive officers (6 people) | 1,949 | 3,800 | (6) |
| all directors, nominees, and executive officers as a group (17 people) | 107,297 | 28,249 | 5.95% |

- (1) Options granted under Middlefield's 1999 Stock Option Plan or the 2007 Omnibus Equity Plan. Options granted under the plans vest and become exercisable one year after the grant date and have ten-year terms.
- (2) Includes shares held by Mr. Caldwell as custodian for his minor children.
- (3) Includes 1,132 shares held by spouse. Mr. Jones disclaims beneficial ownership of those shares.
- (4) Includes 686 shares held by spouse.
- (5) Includes 4,394 shares held by spouse.
- (6) Does not exceed 1%.

Director Stock Ownership Guidelines. Middlefield's Corporate Governance Guidelines include stock ownership guidelines for directors. The guidelines state that within three years after election a director should own Middlefield

common stock equal in value to at least two times the director's yearly base compensation for service as a director of The Middlefield Banking Company, and three times base compensation within six years. As of December 31, 2015, the projected annual yearly compensation of a director other than the Chairman of the Board is \$21,600.

Table of Contents**MANAGEMENT'S DISCUSSION AND ANALYSIS OF MIDDLEFIELD'S FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

This information should be read in conjunction with the consolidated financial statements and accompanying notes to the financial statements. This Management's Discussion and Analysis contains forward-looking statements. Forward-looking statements are based upon a variety of estimates and assumptions. The estimates and assumptions involve judgments about a number of things, including future economic, competitive, and financial market conditions and future business decisions. These matters are inherently subject to significant business, economic, and competitive uncertainties, all of which are difficult to predict and many of which are beyond Middlefield's control. Although Middlefield believes its estimates and assumptions are reasonable, actual results could vary materially from those shown. Inclusion of forward-looking information does not constitute a representation by Middlefield or any other person that the indicated results will be achieved. Investors are cautioned not to place undue reliance on forward-looking information. These forward-looking statements may involve significant risks and uncertainties. Although Middlefield believes that the expectations reflected in such forward-looking statements are reasonable, actual results may differ materially from the results in these forward-looking statements.

Capital maintenance is a priority. Middlefield's Tier 1 leverage capital was 8.69% as of December 31, 2015, with total risk-based capital of 13.20%. The Middlefield Banking Company's Tier 1 leverage capital was 9.23% as of December 31, 2015, with total risk-based capital of 13.73%. In 2015 The Middlefield Banking Company grew the balance sheet as a result of increasing loan volume. We also benefitted from strong income and stockholders' equity experienced growth. The goal of the elevated capital levels is to account for potential economic stress in the markets in which Middlefield operates and to account for the levels of substandard and other nonperforming assets. At September 30, 2016, Middlefield's Tier 1 leverage capital was 10.10%, with total risk-based capital of 14.69%, while The Middlefield Banking Company's Tier 1 leverage capital was 9.02%, with total risk-based capital of 13.0%.

Longer-term prospects for growth. Continued reduction of nonperforming assets continues to be a higher priority than growth. Middlefield does not anticipate significant deposit growth. An increase in loan demand and the availability of high-quality lending opportunities continues to be the driver of growth potential and depends on a broad range of economic factors in the markets in which Middlefield operates, including the condition of real estate markets in northeastern Ohio and in central Ohio.

Nonperforming and classified assets held by the banking industry have decreased from previous elevated levels. Because of uncertainty about economic sustainability and the potential for other factors to have an adverse impact on the prospects for the banking industry, such as national and global economic and political factors, the bank regulatory agencies have insisted that banks increase the size of the buffer that protects a bank from unknown potential adverse events and circumstances: regulatory capital. The total number of banks and savings associations as of the end of 2015 is less than half the number at the end of 1990. Nevertheless, a large percentage of the institutions that remain are small, community-oriented institutions, although the share of total banking assets that they control continues to decline. As an increasing share of the banking universe is occupied by the largest institutions, and taking into account economic, demographic, and technological changes and a greatly expanding regulatory burden, the future of banking favors larger institutions. We believe these factors create a strong incentive for growth through industry consolidation, meaning acquisition of smaller institutions by larger institutions and mergers of smaller institutions as a defense to competitive pressure from larger institutions. We therefore believe that industry consolidation is likely to continue and that the pace of consolidation could actually accelerate.

The trend toward consolidation would be most advantageous for financial institution organizations that have a surplus of capital, a strategy for growth, a strong financial profile, and few if any regulatory supervisory concerns, the ingredients of prompt regulatory approval that could be a significant competitive advantage in the

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market for financial institution mergers and acquisitions. Our goal is to acquire that advantage, although we give no assurance that our efforts to do so will succeed. We continue to commit significant resources to increase operational effectiveness in The Middlefield Banking Company. We continue to invest resources both to resolve existing nonperforming and substandard assets and to prevent growth in those asset classes.

Critical Accounting Policies. Allowance for loan and lease losses. Arriving at an appropriate level of allowance for loan and lease losses involves a high degree of judgment. Middlefield's allowance for loan and lease losses provides for probable losses based upon evaluations of known and inherent risks in the loan portfolio. Management uses historical information to assess the adequacy of the allowance for loan and lease losses as well as the prevailing business environment, which is affected by changing economic conditions and various external factors and which may impact the portfolio in ways currently unforeseen. The allowance is increased by provisions for loan losses and by recoveries of loans previously charged-off and reduced by loans charged-off. For a full discussion of Middlefield's methodology of assessing the adequacy of the reserve for loan losses, refer to Note 1 of Notes to Consolidated Financial Statements of this joint proxy statement/prospectus.

Valuation of Securities. Securities are classified as held to maturity or available for sale on the date of purchase. Only those securities classified as held to maturity are reported at amortized cost. Available-for-sale and trading securities are reported at fair value with unrealized gains and losses included in accumulated other comprehensive income, net of related deferred income taxes, on the Consolidated Balance Sheet. The majority Middlefield's securities are valued based on prices compiled by third party vendors using observable market data. However, certain securities are less actively traded and do not always have quoted market prices. The determination of their fair value, therefore, requires judgment, as this determination may require benchmarking to similar instruments or analyzing default and recovery rates. Examples include certain collateralized mortgage and debt obligations and high-yield debt securities. Realized securities gains or losses are reported within noninterest income in the Consolidated Statement of Income. The cost of securities sold is based on the specific identification method.

Management evaluates securities for other-than-temporary impairment (OTTI) at least on a quarterly basis, and more frequently when economic or market conditions warrant such an evaluation. Investment securities are generally evaluated for OTTI under Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 320, Investments - Debt and Equity Securities. Consideration is given to the length of time and the extent to which the fair value has been less than cost, the financial condition and near-term prospects of the issuer, whether the market decline was affected by macroeconomic conditions and whether Middlefield has the intent to sell the debt security or more likely than not will be required to sell the debt security before its anticipated recovery. In analyzing an issuer's financial condition, Middlefield may consider whether the securities are issued by the federal government or its agencies, or U.S. government-sponsored enterprises, whether downgrades by bond rating agencies have occurred, and the results of reviews of the issuer's financial condition. The assessment of whether an other-than-temporary decline exists involves a high degree of subjectivity and judgment and is based on the information available to management at a point in time.

When OTTI occurs, the amount of the OTTI recognized in earnings depends on whether an entity intends to sell the security or it is more likely than not it will be required to sell the security before recovery of its amortized cost basis. If an entity intends to sell or it is more likely than not it will be required to sell the security before recovery of its amortized cost basis, the OTTI shall be recognized in earnings equal to the entire difference between the investment's amortized cost basis and its fair value at the balance sheet date. The previous amortized cost basis less the OTTI recognized in earnings becomes the new amortized cost basis of the investment. For debt securities that do not meet the aforementioned criteria, the amount of impairment is split into two components as follows: 1) OTTI related to credit loss, which must be recognized in the income statement and 2) OTTI related to other factors, which is recognized in other comprehensive income or loss. The credit loss is defined as the difference between the present

value of the cash flows expected to be collected and the amortized cost basis. For equity securities, the entire amount of impairment is recognized through earnings.

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Debt securities issued by U.S. government agencies, U.S. government-sponsored enterprises, and state and political subdivisions accounted for more than 97.9% of the total available-for-sale portfolio as of December 31, 2015, and more than 98.4% at September 30, 2016, and no credit losses are expected, given the explicit and implicit guarantees provided by the U.S. federal government and the lack of significant unrealized loss positions within the obligations of state and political subdivisions security portfolio. Middlefield considered the following factors in determining whether a credit loss exists and the period over which the debt security is expected to recover:

The length of time and the extent to which the fair value has been less than the amortized cost basis.

Changes in the near term prospects of the underlying collateral of a security such as changes in default rates, loss severity given default and significant changes in prepayment assumptions.

The level of cash flows generated from the underlying collateral supporting the principal and interest payments of the debt securities.

Any adverse change to the credit conditions and liquidity of the issuer, taking into consideration the latest information available about the overall financial condition of the issuer, credit ratings, recent legislation and government actions affecting the issuer's industry and actions taken by the issuer to deal with the present economic climate.

Refer to Note 3 in the consolidated financial statements.

Income Taxes. Middlefield estimates income tax expense based on amounts expected to be owed to the various tax jurisdictions in which Middlefield conducts business. On a quarterly basis, management assesses the reasonableness of Middlefield's effective tax rate based upon management's current estimate of the amount and components of net income, tax credits and the applicable statutory tax rates expected for the full year. The estimated income tax expense is recorded in the Consolidated Statement of Income.

Deferred income tax assets and liabilities are determined using the balance sheet method and are reported in accrued taxes, interest and expenses in the Consolidated Balance Sheet. Under this method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax basis of assets and liabilities and recognizes enacted changes in tax rates and laws. Deferred tax assets are recognized to the extent they exist and are subject to a valuation allowance based on management's judgment that realization is more likely than not.

Accrued taxes represent the net estimated amount due to taxing jurisdictions and are reported in accrued taxes, interest and expenses in the Consolidated Balance Sheet. Middlefield evaluates and assesses the relative risks and appropriate tax treatment of transactions and filing positions after considering statutes, regulations, judicial precedent and other information and maintains tax accruals consistent with management's evaluation of these relative risks and merits. Changes to the estimate of accrued taxes occur periodically due to changes in tax rates, interpretations of tax laws, the status of examinations being conducted by taxing authorities and changes to statutory, judicial and regulatory guidance that impact the relative risks of tax positions. These changes, when they occur, can affect deferred taxes and accrued taxes as well as the current period's income tax expense and can be significant to the operating results of Middlefield.

Goodwill and Other Intangible Assets. Goodwill is the excess of the purchase price over the fair value of the assets acquired in connection with business acquisitions accounted for as purchases. Other intangible assets consist of branch acquisition core deposit premiums. Initially, an assessment of qualitative factors (Step 0) is performed to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, we determine it is not more likely than not that the fair value of a reporting unit is less than its carrying value, then performing the two-step impairment test is unnecessary. However, if we conclude otherwise, then we are required to perform the first step (Step 1) of the two-step impairment test by calculating the fair value of the reporting unit and comparing the fair value with the carrying amount of the

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reporting unit. If the fair value is less than the carrying value, an expense may be required on our books to write down the goodwill to the proper carrying value. Step 2 of impairment testing, which is necessary only if Step 1 fails, compares the implied fair value of the goodwill with the carrying amount of the goodwill.

Middlefield must assess goodwill and other intangible assets each year for impairment. The gross carrying amount of goodwill and intangible assets is tested for impairment in the fourth quarter, after the annual forecasting process.

Fair Value of Financial Instruments. The disclosure of the fair value of financial instruments is based on available market prices or management's estimates of the fair value of such instruments. Management consults with a third party for available market prices as well as performs calculations of the present value of contractual cash flows discounted at current comparative market inputs. Prepayment estimates are utilized when appropriate.

Changes in Financial Condition

General. Middlefield's total assets increased \$57.6 million or 8.5% to \$735.1 million at December 31, 2015 from \$677.5 million at December 31, 2014. This was due to an increase in net loans of \$63.6 million, which was partially offset by a decrease in investments of \$7.8 million.

The increase in Middlefield's total assets reflects a related increase in total liabilities of \$59.2 million or 9.6% to a total balance of \$672.8 million at December 31, 2015 from \$613.7 million at December 31, 2014. Middlefield experienced a decrease in total stockholders' equity of \$1.6 million.

The increase in total liabilities was due to growth in deposits and short-term borrowings for the year. Total deposits increased \$38.3 million or 6.5% to \$624.4 million at December 31, 2015 from \$586.1 million as of December 31, 2014. Short-term borrowings increased \$21.0 million or 141.9% to \$35.8 million at December 31, 2015 from \$14.8 million as of December 31, 2014. The net decrease in total stockholders' equity can be attributed to a \$6.8 million increase in treasury stock, partially offset by an increase in retained earnings and common stock of \$4.7 million and of \$0.7 million, respectively.

Cash on hand and Federal funds sold. Cash and due from banks and federal funds sold represent cash and cash equivalents which decreased \$1.9 million or 7.4% to \$23.7 million at December 31, 2015 from \$25.6 million at December 31, 2014. Deposits from customers into savings and checking accounts, loan and security repayments and proceeds from borrowed funds typically increase these accounts. Decreases result from customer withdrawals, new loan originations, security purchases and repayments of borrowed funds.

Securities. Management's objective in structuring the portfolio is to maintain a prudent level of liquidity while providing an acceptable rate of return without sacrificing asset quality. Maturing securities have historically provided sufficient liquidity. The balance of total securities decreased \$7.8 million, or 5.1%, as compared to 2014, with the ratio of securities to total assets decreasing to 19.9% at December 31, 2015, compared to 22.8% at December 31, 2014.

Middlefield benefits from owning mortgage-backed securities, which totaled \$26.6 million or 18.6% of Middlefield's total investment portfolio at December 31, 2015. The primary difference of mortgage-backed securities is the amortization of principal as compared to other types of investment securities, which deliver proceeds upon maturity or call date. The weighted-average federal tax-equivalent (FTE) yield on all debt securities at year-end 2015 was 4.11%, as compared to 4.18% at year-end 2014. While Middlefield's focus is to generate interest revenue primarily through loan growth, management will continue to invest excess funds in securities when opportunities arise.

Loans receivable. The loans receivable category consists primarily of single-family mortgage loans used to purchase or refinance personal residences located within Middlefield's market area and commercial real estate

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loans used to finance properties that are used in the borrowers' businesses or to finance investor-owned rental properties and commercial loans to finance the business operations and to a lesser extent construction and consumer loans. Net loans receivable increased \$63.6 million or 13.7% to \$527.3 million at December 31, 2015 from \$463.7 million at December 31, 2014. Included in this growth were increases in real estate mortgages and C&I loans of \$63.4 million and \$7.6 million, respectively, but partially offset by an \$8.2 million decrease in real estate construction loans.

The product mix in the loan portfolio is commercial and industrial loans equaling 8.0%, construction loans 4.1%, residential real estate loans 43.6%, commercial real estate loans 43.4% and consumer loans 0.9% at December 31, 2015 compared with 7.4%, 6.4%, 44.6%, 40.5% and 1.0%, respectively, at December 31, 2014.

Loans contributed 83.3% of total interest income in 2015 and 81.5% in 2014. The loan portfolio yield of 4.81% in 2015 was 30 basis points higher than the average yield for total interest-earning assets. Management recognizes that while the loan portfolio holds some of Middlefield's highest yielding assets, it is inherently the most risky portfolio. Accordingly, management attempts to balance credit risk versus return with conservative credit standards. Management has developed and maintains comprehensive underwriting guidelines and a loan review function that monitors credits during and after the approval process. Management follows additional procedures to obtain current borrower financial information annually throughout the life of the loan obligation.

To minimize risks associated with changes in the borrower's future repayment capacity, Middlefield generally requires scheduled periodic principal and interest payments on all types of loans and normally requires collateral.

Middlefield will continue to monitor the size of its loan portfolio growth. Middlefield's lending markets have rebounded from the suppressed levels of loan originations in previous years. Middlefield anticipates total loan growth to be steady, with volume to continue at a moderate pace. Middlefield remains committed to sound underwriting practices without sacrificing asset quality and avoiding exposure to unnecessary risk that could weaken the credit quality of the portfolio.

FHLB stock. FHLB stock remained unchanged at \$1.9 million at December 31, 2015 when compared to the prior year.

Goodwill. Goodwill results from prior business acquisitions and represents the excess of the purchase price over the fair value of acquired tangible assets and liabilities and identifiable intangible assets. Goodwill is assessed annually for impairment and any such impairment is recognized in the period identified by a charge to earnings.

Middlefield values core deposits and monitors the ongoing value of core deposit intangibles and goodwill on an annual basis. Goodwill balances were unchanged in 2015.

Bank owned life insurance. Bank owned life insurance (BOLI) is universal life insurance, purchased by Middlefield, on the lives of Middlefield's officers. The beneficial aspects of these universal life insurance policies are tax-free earnings and a tax-free death benefit, which are realized by Middlefield as the owner of the policies. BOLI increased by \$4.0 million to \$13.1 million as of December 31, 2015 from \$9.1 million at the end of 2014 as a result of the additional insurance purchases and increases in cash surrender value.

Deposits. Interest-earning assets are funded generally by both interest-bearing and noninterest-bearing core deposits. Deposits are influenced by changes in interest rates, economic conditions and competition from other banks. Middlefield considers various sources when evaluating funding needs, including but not limited to deposits, which represented 93.2% of Middlefield's total funding sources at December 31, 2015. The deposit base consists of demand deposits, savings, money market accounts and time deposits. Total deposits increased \$38.3 million or 6.5% to \$624.4

million at December 31, 2015 from \$586.1 million at December 31, 2014.

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Savings and time deposits are the largest sources of funding for Middlefield's earning assets, making up a combined 59.6% of total deposits. During 2015, time deposits increased \$21.4 million, or 12.6% while savings increased \$2.2 million, or 1.2%, from year-end 2014. The time deposit increase is primarily due to growth in out-of-market time deposits.

Demand deposit balances increased in 2015 by \$11.8 million, or 7.3%, to finish at \$173.7 million at year-end 2015 as compared to \$161.9 million at year-end 2014. Middlefield will continue to experience increased competition for deposits in its market areas, which could challenge net growth in its deposit balances. Middlefield will continue to evaluate its deposit portfolio mix to properly employ both retail and wholesale funds to support earning assets and minimize interest costs.

Borrowed funds. Middlefield uses short and long-term borrowings as another source of funding to benefit asset growth and liquidity needs. These borrowings primarily include FHLB advances, junior subordinated debt, lines of credit from other banks and repurchase agreement borrowings. Borrowed funds increased \$20.4 million or 79.9% to \$45.8 million at December 31, 2015 from \$25.4 million at December 31, 2014. Short-term borrowings increased \$21.0 million in order to fund loan growth and purchase treasury shares.

Stockholders' equity. Middlefield maintains a capital level that exceeds regulatory requirements as a margin of safety for its depositors and shareholders. All of the capital ratios exceeded the regulatory well-capitalized guidelines.

Stockholders' equity totaled \$62.3 million at December 31, 2015, compared to \$63.9 million at December 31, 2014, which represents a decrease of 2.4%. Treasury stock increased \$6.8 million, or 100.7%, from \$6.7 million at December 31, 2014. Retained earnings increased \$4.7 million resulting from net income, less cash dividends paid of \$2.2 million, or \$1.07 per share, year-to-date. Common stock increased \$0.7 million or 1.9% to \$36.2 million at December 31, 2015 from \$35.5 million at December 31, 2014. Middlefield maintains a dividend reinvestment and stock purchase plan. The plan allows shareholders to purchase additional shares of Company stock. A benefit of the plan is to permit the shareholders to reinvest cash dividends as well as make supplemental purchases without the usual payment of brokerage commissions. During 2015, shareholders invested \$0.7 million through the dividend reinvestment and stock purchase plan. These proceeds resulted in the issuance of 20,393 new shares at an average price of \$32.17.

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Average Balance Sheet and Yield/Rate Analysis. The following tables set forth, for the periods indicated, information concerning the total dollar amounts of interest income from interest-earning assets and the resultant average yields, the total dollar amounts of interest expense on interest-bearing liabilities and the resultant average costs, net interest income, interest rate spread and the net interest margin earned on average interest-earning assets. For purposes of these tables, average balances are calculated using monthly averages and the average loan balances include nonaccrual loans and exclude the allowance for loan and lease losses, and interest income includes accretion of net deferred loan fees. Yields on tax-exempt securities (tax-exempt for federal income tax purposes) are shown on a fully tax-equivalent basis utilizing a federal tax rate of 34%.

| (Dollars in thousands) | For the Twelve Months Ended December 31, | | | | | | | | |
|--|--|---------------|--------------------|-------------------|---------------|--------------------|-------------------|---------------|--------------------|
| | Average Balance | 2015 Interest | Average Yield/Cost | Average Balance | 2014 Interest | Average Yield/Cost | Average Balance | 2013 Interest | Average Yield/Cost |
| Interest-earning assets: | | | | | | | | | |
| Loans receivable | \$ 494,931 | \$ 23,824 | 4.81% | \$ 455,035 | \$ 22,726 | 4.99% | \$ 415,610 | \$ 22,496 | 5.41% |
| Investment securities (3) | 152,015 | 4,627 | 4.11% | 158,585 | 5,023 | 4.18% | 182,942 | 5,558 | 3.90% |
| Interest-bearing deposits with other banks | 23,855 | 144 | 0.60% | 33,119 | 125 | 0.38% | 38,117 | 124 | 0.33% |
| Total interest-earning assets | 670,801 | 28,595 | 4.51% | 646,739 | 27,874 | 4.56% | 636,669 | 28,178 | 4.67% |
| Noninterest-earning assets | 39,470 | | | 24,845 | | | 24,278 | | |
| Total assets | \$ 710,271 | | | \$ 671,584 | | | \$ 660,947 | | |
| Interest-bearing liabilities: | | | | | | | | | |
| Interest-bearing demand deposits | \$ 62,064 | 191 | 0.31% | \$ 59,484 | 193 | 0.32% | \$ 81,941 | 215 | 0.26% |
| Money market deposits | 76,034 | 312 | 0.41% | 75,443 | 300 | 0.40% | 77,991 | 303 | 0.39% |
| Savings deposits | 179,095 | 542 | 0.30% | 177,958 | 560 | 0.31% | 178,678 | 608 | 0.34% |
| Certificates of deposit | 190,097 | 2,381 | 1.25% | 180,634 | 2,580 | 1.43% | 184,539 | 3,583 | 1.94% |
| Borrowings | 22,108 | 394 | 1.78% | 19,567 | 437 | 2.23% | 20,451 | 541 | 2.65% |
| Total interest-bearing liabilities | 529,398 | 3,820 | 0.72% | 513,086 | 4,070 | | | | |