

MVB FINANCIAL CORP
Form 424B5
March 13, 2017

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)
[TABLE OF CONTENTS](#)

[Table of Contents](#)

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-208949

**PROSPECTUS SUPPLEMENT TO PROSPECTUS
DATED JANUARY 11, 2016**

Common Stock Subscription Rights to Purchase up to 434,783 Shares of Common Stock

We are distributing to our shareholders, free of charge, non-transferable subscription rights to purchase shares of our common stock. You will receive one right for each share of common stock that you owned of record as of 5:00 p.m., Eastern Time, on March 10, 2017.

Each whole subscription right will entitle you to purchase 0.04349 of a share of our common stock at a subscription price of \$11.50 per share, which we refer to as the basic subscription right. If you fully exercise your basic subscription right and other holders of subscription rights do not fully exercise their basic subscription rights, you may also exercise an over-subscription right to purchase all or any portion of any additional shares of common stock that remain unsubscribed as a result of any unexercised rights subject to the limitations described in this prospectus. If the rights offering is fully subscribed, the total purchase price of the shares offered in the rights offering will be approximately \$5.0 million. We are not requiring a minimum subscription to complete the rights offering. Larry F. Maza, the Company's President, Chief Executive Officer and a member of the Company's Board of Directors (the "CEO") has advised the Company that he intends to exercise his over-subscription right to purchase a minimum of 100,000 Shares, inclusive of the number of shares he may purchase under his basic subscription right.

We have also entered into an investment agreement (the "Investment Agreement") with the CEO, who has agreed to purchase from us that number of additional shares of common stock, if any, equal to the amount by which 100,000 exceeds the number of shares of common stock purchased by the CEO pursuant to the exercise of his basic subscription right and over-subscription right. We refer to the shares of common stock that the CEO may purchase under the Investment Agreement as the "Investor Shares"

Your subscription rights may be exercised at any time during the period starting on March 13, 2017 and ending at 5:00 p.m., Eastern Time, on March 31, 2017, unless extended. We currently do not intend to extend the expiration date. You should carefully consider whether to exercise your rights before the expiration of the rights offering period. The exercise of your subscription rights is irrevocable and our Board of Directors makes no recommendation as to whether you should exercise your rights. Your subscription rights may not be sold, transferred or assigned to anyone else and will not be listed for trading on any stock exchange or trading market. No shareholder exercising subscription rights, together with any other person with whom such shareholder's beneficial ownership may be aggregated under applicable law, may exceed 4.9% beneficial ownership of our common stock upon completion of the rights offering.

We will conduct the rights offering solely on a "best efforts" basis without the services of an underwriter or placement agent, but we may choose to do so at our discretion.

We may amend, terminate or cancel the rights offering, or both, at any time and for any reason. If we terminate the rights offering, the subscription agent will return all subscription payments it has received for the terminated offering without interest, penalty or deduction.

Edgar Filing: MVB FINANCIAL CORP - Form 424B5

Our common stock is quoted on the OTC Markets OTCQB tier, or OTCQB, under the symbol "MVBF." On March 10, 2017, the closing sale price for our shares was \$13.50 per share. All shares issued in the rights offering will also be quoted on the OTCQB under the same symbol. The rights are not transferable and will not be quoted on the OTCQB or any other stock exchange or trading market.

This investment in our common stock involves risks. You should carefully consider all of the information set forth in this prospectus supplement and the accompanying prospectus, including the risk factors beginning on page S-16 of this prospectus supplement and on page 4 of the accompanying prospectus, as well as the risk factors and other information contained in any documents we incorporate by reference into this prospectus supplement and the accompanying prospectus before exercising your subscription rights. See "Incorporation of Certain Information by Reference."

OFFERING SUMMARY

Price: \$11.50 per share

	Per Share	Total(1)
Gross proceeds	\$ 11.50	\$ 5,000,004
Net proceeds	\$ 10.98	\$ 4,775,004

(1) Based on 434,783 shares offered being sold and estimated expenses of \$225,000. No assurance can be given that all or any of the shares will be sold.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS SUPPLEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

THESE SECURITIES ARE NOT DEPOSITS OR OTHER OBLIGATIONS OF MVB BANK AND ARE NOT INSURED OR GUARANTEED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION, THE DEPOSIT INSURANCE FUND OR ANY OTHER GOVERNMENTAL AGENCY OR FUND.

The date of this prospectus supplement is March 13, 2017.

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

ABOUT THIS PROSPECTUS

<u>QUESTIONS AND ANSWERS RELATING TO THE RIGHTS OFFERING</u>	<u>S-1</u>
<u>SUMMARY</u>	<u>S-8</u>
<u>CAUTION REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>S-14</u>
<u>RISK FACTORS</u>	<u>S-16</u>
<u>USE OF PROCEEDS</u>	<u>S-20</u>
<u>PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY</u>	<u>S-21</u>
<u>CAPITALIZATION</u>	<u>S-22</u>
<u>THE RIGHTS OFFERING</u>	<u>S-23</u>
<u>THE INVESTMENT AGREEMENT</u>	<u>S-33</u>
<u>DESCRIPTION OF OUR COMMON STOCK</u>	<u>S-34</u>
<u>CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS</u>	<u>S-37</u>
<u>PLAN OF DISTRIBUTION</u>	<u>S-41</u>
<u>LEGAL MATTERS</u>	<u>S-41</u>
<u>EXPERTS</u>	<u>S-41</u>
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	<u>S-42</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>S-42</u>

Prospectus

ABOUT THIS PROSPECTUS

<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>1</u>
<u>MVB FINANCIAL CORP</u>	<u>3</u>
<u>RISK FACTORS</u>	<u>4</u>
<u>USE OF PROCEEDS</u>	<u>4</u>
<u>RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED DIVIDENDS</u>	<u>4</u>
<u>DESCRIPTION OF SECURITIES WE MAY OFFER</u>	<u>5</u>
<u>DESCRIPTION OF CAPITAL STOCK</u>	<u>5</u>
<u>DESCRIPTION OF DEBT SECURITIES</u>	<u>11</u>
<u>DESCRIPTION OF WARRANTS</u>	<u>18</u>
<u>DESCRIPTION OF DEPOSITARY SHARES</u>	<u>19</u>
<u>PLAN OF DISTRIBUTION</u>	<u>21</u>
<u>LEGAL MATTERS</u>	<u>23</u>
<u>EXPERTS</u>	<u>23</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>23</u>
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	<u>24</u>

You should rely only on the information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with additional or different information from that contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus. You should assume that the information contained in this prospectus supplement is accurate only as of the date on the front cover of this prospectus supplement, the information contained in the accompanying prospectus is accurate only as of the date on the front cover of the prospectus and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement, the accompanying prospectus or any exercise of the subscription rights. Our business, financial condition, results of operations and prospects may have changed since those dates.

Table of Contents

ABOUT THIS PROSPECTUS

This document consists of two parts. The first part is the prospectus supplement, which describes the specific terms of this offering. The second part is the accompanying prospectus, which describes more general information about us and our securities, some of which may not apply to this offering. You should read both this prospectus supplement and the accompanying prospectus, together with additional information described under the heading "Where You Can Find More Information" below.

Both this prospectus supplement and the accompanying prospectus include important information about us, our common stock and other information you should know before investing in our common stock. This prospectus supplement also adds to, updates and changes information in the accompanying prospectus. To the extent that any statement we make in the prospectus supplement is inconsistent with the statements made in the accompanying prospectus, the statements made in the accompanying prospectus are deemed modified or superseded by the statements made in this prospectus supplement. You should read this prospectus supplement and the accompanying prospectus as well as the additional information described under the caption "Where You Can Find More Information" in the accompanying prospectus before investing in our common stock.

As used in this prospectus supplement, the terms "MVB Financial Corp." "the Company," "we," "our," and "us" refer to MVB Financial Corp. and our consolidated subsidiaries, unless the context indicates otherwise. This prospectus supplement and the accompanying prospectus include our trademarks and other trade names identified herein. All other trademarks and trade names appearing in this prospectus supplement and the accompanying prospectus are the property of their respective holders.

Table of Contents

QUESTIONS AND ANSWERS RELATING TO THE RIGHTS OFFERING

The following are examples of what we anticipate will be common questions about the rights offering. The answers are based on selected information included elsewhere in this prospectus supplement and the accompanying prospectus. The following questions and answers do not contain all of the information that may be important to you and may not address all of the questions that you may have about the rights offering. This prospectus supplement and the accompanying prospectus contain more detailed descriptions of the terms and conditions of the rights offering and provide additional information about us and our business, including potential risks related to the rights offering, the common stock of the Company, and our business.

What is being offered in the rights offering?

We are distributing, at no cost or charge to our shareholders, subscription rights to purchase shares of our common stock. These rights may be exercised only by the shareholders to whom they are distributed, and may not be sold, transferred or assigned to anyone else. Holders of our common stock will receive one subscription right for each share of common stock held of record as of 5:00 p.m., Eastern Time on March 10, 2017, the record date of the rights offering. The subscription rights will be evidenced by subscription rights certificates. Each subscription right will entitle you to purchase 0.04349 of a share of our common stock at a subscription price equal to \$11.50 per whole share. No shareholder exercising subscription rights together with any other person with whom such shareholder's beneficial ownership may be aggregated under applicable law may exceed 4.9% beneficial ownership of our common stock (the 4.9% offering restriction"). Accordingly, no shareholder whose beneficial ownership of our common stock as of the record date, together with any other person with whom such shareholder's beneficial ownership may be aggregated under applicable law, exceeded 4.9%, may participate in the rights offering. You may exercise any number of your subscription rights, or you may choose not to exercise any subscription rights.

Fractional shares of our common stock resulting from the exercise of the basic subscription right or the over-subscription right, each as described below, will be eliminated by rounding down to the nearest whole share, with the total subscription payment being adjusted accordingly. As a result, we may not issue the full number of shares authorized for issuance in connection with the rights offering. Any excess subscription payments received by the subscription agent (or rights agent) will be returned, without interest, penalty or deduction, as soon as practicable after the completion of the rights offering.

ALL EXERCISES OF SUBSCRIPTION RIGHTS ARE IRREVOCABLE. Once you deliver your subscription rights certificate to exercise any subscription rights, you cannot revoke the exercise of your subscription rights, even if you later learn information that you consider to be unfavorable and even if the market price of our common stock is below the subscription price. You should not exercise your subscription rights unless you are sure that you wish to purchase additional shares of our common stock.

What is the basic subscription right?

For each right that you receive, you will have a basic subscription right to buy from us 0.04349 of a share of our common stock at the subscription price. Subject to the 4.9% offering restriction, you may exercise your basic subscription right for some or all of your subscription rights, or you may choose not to exercise any subscription rights.

For example, if you owned 1,000 shares of our common stock as of 5:00 p.m., Eastern Time, on the record date, you would receive the same number of subscription rights and would have the right to purchase 43.49 shares of common stock (rounded down to 43 shares) for \$11.50 per share with your basic subscription right.

Table of Contents

What is the over-subscription right?

If you exercise all of your basic subscription right, you will have the opportunity to purchase all or any portion of the shares of common stock that are not purchased by other holders of subscription rights; provided that, if any over-subscription rights are exercised, we will not issue a number of shares in excess of 434,783 pursuant to the exercise of basic subscription rights and over-subscription rights. If you fully exercise your basic subscription right and other holders of subscription rights do not fully exercise their basic subscription rights, you may also exercise an over-subscription right to purchase all or any portion of the additional shares of common stock that remain unsubscribed as a result of any unexercised rights. While we reserve the right to reject in whole or in part any or all over-subscription requests regardless of the availability of shares, if sufficient common shares are available, we will seek to honor your over-subscription request in full. If, however, over-subscription requests exceed the number of common shares available to be purchased pursuant to the over-subscription right, we will allocate the available common shares among shareholders who oversubscribed by multiplying the number of shares requested by each shareholder through the exercise of their over-subscription rights by a fraction that equals (x) the number of shares available to be issued through over-subscription rights divided by (y) the total number of shares requested by all subscribers through the exercise of their over-subscription rights. We will not issue fractional shares through the exercise of over-subscription rights.

The CEO has advised the Company that he intends to exercise his over-subscription right to purchase a minimum of 100,000 Shares, inclusive of the number of shares he may purchase under his basic subscription right. As of the record date, the CEO had the basic subscription right to purchase 6,587 shares.

In order to properly exercise your over-subscription right, you must deliver the subscription payment related to your over-subscription right prior to the expiration of the rights offering. Because we will not know the total number of unsubscribed shares prior to the expiration of the rights offering, if you wish to maximize the number of shares you purchase pursuant to your over-subscription right, you will need to deliver payment in an amount equal to the aggregate subscription price for the maximum number of shares of our common stock available to you under the over-subscription right. See "The Rights Offering The Subscription Right Over-Subscription Right."

Any excess subscription payments received by the subscription agent will be returned, without interest, as soon as practicable.

Are there any limitations on the number of subscription rights I may exercise in the rights offering?

You may only purchase the number of whole shares of common stock purchasable upon exercise of the number of basic subscription rights distributed to you in the rights offering, plus up to the number of shares that may be made available pursuant to the over-subscription rights. Accordingly, the number of shares of common stock you may purchase in the rights offering is limited by the number of shares of our common stock you owned on the record date and by the extent to which other shareholders exercise their subscription rights, including any over-subscription rights. We reserve the right to reject in whole or in part any or all over-subscription requests regardless of the availability of shares.

Your subscription right may be reduced if you are subject to the 4.9% offering restriction.

How many shares of our common stock will be outstanding after the rights offering and the purchase of Investment Shares, if any, under Investment Agreement?

Assuming the conditions to the consummation of the transactions contemplated by the Investment Agreement are satisfied, we will issue a minimum of 434,783 shares of our common stock through the exercise of the basic subscription rights and the over-subscription rights (including shares purchased by

Table of Contents

the CEO pursuant to the exercise of those rights). If the rights offering is fully subscribed, we will issue the CEO up to a maximum of an additional 93,413 Investor Shares, and after giving effect to the rights offering and the transactions contemplated by the Investment Agreement, we will have up to a maximum of 10,524,740 shares outstanding.

How much money will the Company receive from the rights offering and the other transactions under the Investment Agreement?

If the rights offering is fully subscribed, we will receive an aggregate of approximately \$6,074,254 million from the sale of shares pursuant to the basic subscription rights and oversubscription rights (including shares purchased by the CEO pursuant to the exercise of those rights) and the Investor Shares, if any.

When is CEO obligated to purchase Investor Shares?

We have entered into the Investment Agreement with the CEO. Pursuant to the Investment Agreement, in a transaction separate from the rights offering, the CEO has agreed to purchase from us that number of Investor Shares equal to the amount by which 100,000 exceeds the number of shares of common stock purchased by the CEO pursuant to the exercise of his basic subscription right and over-subscription right. The CEO has agreed to not sell or otherwise transfer any Investor Shares purchased by him in excess of Shares acquired through his basic and/or any over-subscription right in the rights offering, in a public or private transaction, for at least six-months from the Closing Date. The price per share paid by the CEO for the Investor Shares will be equal to the subscription price of \$11.50. Please see "The Investment Agreement" for further information.

How do I exercise my subscription rights?

If you wish to exercise your subscription rights, you must deliver the following items to the subscription agent, Computershare Trust Company, N.A., before 5:00 p.m., Eastern Time, on March 31, 2017:

a properly completed subscription rights certificate; and

payment for the full amount of shares of common stock you wish to purchase pursuant to your basic subscription right and over-subscription right.

If your shares are held in the name of a broker, dealer, or other nominee, then you should deliver your subscription rights certificate and subscription payment to that record holder. If you are the record holder, then you should deliver your subscription rights certificate and subscription payment by express mail, overnight delivery or by first class mail to the subscription agent as follows:

By Express Mail or Overnight Delivery:

Computershare Trust Company, N.A.
Corporate Actions Voluntary Offer
250 Royall Street, Suite V
Canton, MA 02021

By First Class Mail:

Computershare Trust Company, N.A.
Corporate Actions Voluntary Offer
P.O. Box 43011
Providence, RI 02940-3011

Payments must be made in full in United States dollars for the full number of shares for which you are subscribing by:

cashier's check drawn on a U.S. bank made payable to Computershare Trust Company, N.A. (acting as subscription agent for MVB Financial Corp.), including the shareholder name as it appears on the subscription rights card and account number as it appears on the subscription rights card; or

Table of Contents

personal check drawn upon a U.S. bank made payable to Computershare Trust Company, N.A. (acting as subscription agent for MVB Financial Corp.); or

wire transfer of immediately available funds to the subscription agent.

Please contact the information agent, Georgeson LLC, at (866) 821-0284 for additional information regarding payment by cashier's check or for instructions on wire transferring the subscription payment. **Any personal check used to pay for shares of our common stock must clear the appropriate financial institutions prior to 5:00 p.m., Eastern Time, on March 31, 2017.** The clearinghouse may require five or more business days. Accordingly, if you intend to pay the subscription payment by means of a personal check, we urge you to make payment sufficiently in advance of the expiration of the rights offering to ensure such payment is both received and cleared by such date.

Additional details are provided under "The Rights Offering Method of Exercising Subscription Rights" and "The Rights Offering Payment Method."

Why are we conducting the rights offering?

On December 6, 2016, we announced that we had entered into securities purchase agreements with certain institutional investors pursuant to which we raised aggregate gross proceeds of approximately \$22.0 million through a private placement of 1,913,044 shares of common stock (the "Private Placement"). The rights offering is intended to provide our existing shareholders the opportunity to purchase additional shares of our common stock at the same price as in the Private Placement. See also "Use of Proceeds."

How was the subscription price of \$11.50 determined?

The subscription price was set at \$11.50 per share so that our existing shareholders would have the opportunity to purchase additional shares of our common stock at the same price as in the Private Placement.

With respect to the price in the Private Placement, based on advice from our financial advisor, Keefe, Bruyette & Woods, Inc. ("KBW") and the orders placed by the institutional investors in the Private Placement, our Board of Directors concluded that the price of \$11.50 per share of common stock to be issued in the Private Placement was the highest price we could obtain in order to attract the amount of subscriptions necessary to raise \$22.0 million, which is the amount of capital the Board of Directors believed was appropriate to raise in the Private Placement in order to strengthen the Company's balance sheet, position the Company for the initiatives discussed below in "Use of Proceeds" and maintain healthy regulatory capital ratios going forward.

The subscription price is not necessarily related to our book value, net worth or any other established criteria of value and may or may not be considered the fair value of our common stock to be offered in the rights offering. You should not consider the subscription price as an indication of the value of the Company or our common stock. You should not assume or expect that, after the rights offering, our common stock will trade at or above the subscription price in any given time period. The market price of our common stock may decline during or after the rights offering, and you may not be able to sell shares of common stock purchased through the rights offering at a price equal to or greater than the subscription price. You should obtain a current quote for our common stock before exercising your subscription rights and make your own assessment of our business and financial condition, our prospects for the future and the terms of this rights offering.

We retained KBW as our financial advisor to advise us with respect to an appropriate per share price range for the securities offered in the Private Placement, for which service we paid KBW a fee of \$1.21 million upon closing of the Private Placement. KBW will not receive any fee in connection with the rights offering.

Table of Contents

Am I required to exercise the rights I receive in the rights offering?

No. You may exercise any number of your subscription rights, or you may choose not to exercise any subscription rights.

What happens if I choose not to exercise my subscription rights?

You are not required to exercise your subscription rights or otherwise take any action in response to this rights offering. If you do not exercise your basic subscription right and the rights offering is completed, the number of shares of our common stock you own will not change, but your percentage ownership of our total outstanding common stock will decrease because shares will be purchased by other shareholders in the rights offering. In addition, if you exercise your basic subscription right in full but do not exercise your over-subscription right in full and other shareholders fully exercise their basic subscription right and over-subscription right, the percentage of our common stock owned by all of these other shareholders will increase.

How soon must I act to exercise my subscription rights?

The subscription rights may be exercised at any time during the subscription period, which commences on March 13, 2017, through the expiration date for the rights offering, which is 5:00 p.m., Eastern Time, on March 31, 2017 unless extended. We currently do not intend to extend the expiration date. If you elect to exercise any subscription rights, the subscription agent must actually receive all required documents and payments from you at or prior to the expiration date.

May I transfer my subscription rights?

No. You may not sell, transfer or assign your subscription rights to anyone else.

Are we requiring a minimum subscription to complete the rights offering?

No. We are not requiring a minimum number of rights exercised or shares sold to complete the rights offering.

Are there any other conditions to the completion of the rights offering?

Yes. The completion of the rights offering is subject to the conditions described in the subsection below entitled "The Rights Offering Conditions and Termination."

Can the rights offering be terminated?

Yes. We may terminate the rights offering at any time prior to the expiration date for any reason. If the Rights Offering is terminated, all subscription payments received by the subscription agent will be returned, without interest, penalty or deduction, as soon as practicable to those persons who subscribed for shares in the rights offering.

What should I do if I want to participate in the rights offering, but my shares are held in the name of my broker, dealer, custodian bank or other nominee?

If you hold your shares of our common stock in the name of a broker, dealer, custodian bank or other nominee, then your broker, dealer, custodian bank or other nominee is the record holder of the shares of our common stock that you own. The record holder must exercise the subscription rights on your behalf for the shares of our common stock you wish to purchase.

We will ask your broker, dealer, custodian bank or other nominee to notify you of the rights offering.

Table of Contents

If you wish to participate in the rights offering and purchase shares of our common stock, please contact the record holder of your shares promptly.

Will the shares of common stock I acquire in the rights offering be subject to any shareholder agreement restricting my ability to sell or transfer my new shares of common stock?

No. You will not be subject to any shareholder agreement that restricts your ability to sell or transfer any new shares of common stock acquired by you in the rights offering. For more information, see "The Rights Offering Shareholder Agreements and Other Restrictions."

After I exercise my subscription rights, can I change my mind?

No. All exercises of subscription rights are irrevocable by the shareholders, even if you later learn information about us that you consider unfavorable. You should not exercise your subscription rights unless you are certain that you wish to purchase the shares of common stock offered pursuant to the rights offering.

Does exercising my subscription rights involve risk?

Yes. The exercise of your subscription rights involves risks. You should carefully consider the risks described under the heading "Risk Factors" in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

Has our Board of Directors made a recommendation to our shareholders regarding the rights offering?

No. Our Board of Directors is not making a recommendation regarding your exercise of the subscription rights. You are urged to decide whether or not to exercise your subscription rights based on your own assessment of our business and the rights offering. See the section entitled "Risk Factors" in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

What fees or charges apply if I exercise my subscription rights?

There will be no cost to you beyond the subscription price for the shares of common stock you purchase and any fees your broker may charge you.

When will I receive my new shares of common stock?

The subscription agent will arrange for the issuance of the shares of common stock purchased, as soon as practicable after the expiration of the rights offering period. For more information, see "The Rights Offering Issuance of Shares of Common Stock."

Will the subscription rights be listed on a stock exchange or trading market?

The subscription rights may not be sold, transferred or assigned to anyone else and will not be quoted on the OTCQB or any other stock exchange or trading market. Our common stock is quoted on the OTCQB under the symbol "MVBF," and the shares of common stock to be issued in connection with the rights offering will also be quoted on the OTCQB under the same symbol.

What are the U.S. federal income tax consequences of exercising my subscription rights?

The receipt and exercise of your subscription rights should generally not be taxable under U.S. federal income tax laws. You should, however, seek specific tax advice from your personal tax advisor in

Table of Contents

light of your personal tax situation and as to the applicability and effect of any other tax laws. See the section below entitled "Certain Material U.S. Federal Income Tax Considerations."

How many shares of common stock will be outstanding after the rights offering?

As of March 10, 2017, there were 9,996,544 shares of our common stock outstanding. We will issue up to 434,783 shares of common stock in the rights offering, depending on the number of subscription rights that are exercised. Assuming there are no other changes in the number of outstanding shares prior to the expiration of the rights offering, and based on the number of shares outstanding as of March 10, 2017, if we issue all 434,783 shares of common stock available for the exercise of basic subscription rights in the rights offering, we would have 10,431,327 shares of common stock outstanding following the completion of the rights offering.

Who should I contact if I have more questions?

If you have more questions about the rights offering or need additional copies of the rights offering documents, please contact the information agent, Georgeson LLC, at 866-821-0284.

Table of Contents

SUMMARY

This summary highlights the information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary does not contain all of the information that you should consider before deciding whether to exercise your subscription rights. You should carefully read this entire prospectus and the accompanying prospectus, including the information contained under the heading "Risk Factors," and the documents incorporated by reference into this prospectus supplement, which are described below under the headings "Incorporation of Certain Information by Reference" and "Where You Can Find More Information."

Company Information

The Company was formed on May 29, 2003 and became a bank holding company under the laws of West Virginia on January 1, 2004, and, effective December 19, 2012, became a financial holding company. The Company features a subsidiary and multiple affiliated businesses, including MVB Bank, Inc. (the "Bank" or "MVB Bank") and the Bank's wholly-owned subsidiaries MVB Mortgage and MVB Insurance, LLC ("MVB Insurance").

The Bank was formed on October 30, 1997 and chartered under the laws of the State of West Virginia. The Bank commenced operations on January 4, 1999.

During the fourth quarter of 2012, the Bank acquired Potomac Mortgage Group, Inc. ("PMG" which, following July 15, 2013, began doing business under the registered trade name "MVB Mortgage"), a mortgage company in the northern Virginia area, and fifty percent (50%) interest in a mortgage services company, Lender Service Provider, LLC ("LSP"). In the third quarter of 2013, this fifty percent (50%) interest in LSP was reduced to a twenty-five percent (25%) interest through a sale of a partial interest. MVB Mortgage has eleven mortgage only offices, located in Virginia, within the Washington, District of Columbia metropolitan area as well as North Carolina and South Carolina, and, in addition, has mortgage loan originators located at select Bank locations throughout West Virginia.

In addition to MVB Mortgage, the Bank has a wholly-owned subsidiary, MVB Insurance, LLC. MVB Insurance was originally formed in 2000 and reinstated in 2005, as a Bank subsidiary. Effective June 1, 2013, MVB Insurance became a direct subsidiary of the Company. MVB Insurance offers select insurance products such as title insurance, individual insurance, commercial insurance, employee benefits insurance, and professional liability insurance. On June 30, 2016, the Company entered into an Asset Purchase Agreement with USI Insurance Services ("USI"), in which USI purchased substantially all of the assets and assumed certain liabilities of MVB Insurance. MVB Insurance retained the assets related to, and continues to operate, its title insurance business. The title insurance business is immaterial in terms of revenue and the Company has reorganized MVB Insurance as a subsidiary of the Bank.

The Company's primary business activities, through its subsidiaries, are currently community banking and mortgage banking. As a community banking entity, the Bank offers its customers a full range of products through various delivery channels. Such products and services include checking accounts, NOW accounts, money market and savings accounts, time certificates of deposit, commercial, installment, commercial real estate and residential real estate mortgage loans, debit cards, and safe deposit rental facilities. Services are provided through our walk-in offices, automated teller machines, drive-in facilities, and internet and telephone banking. Additionally, the Bank offers non-deposit investment products through an association with a broker-dealer. Since the opening date of January 4, 1999, the Bank has experienced significant growth in assets, loans, and deposits due to overwhelming community and customer support in the Marion County and Harrison County, West Virginia markets, expansion into Monongalia and Kanawha Counties, West Virginia and, most recently, into Fairfax County, Virginia. With the acquisition of PMG, mortgage banking has become an integral portion of the Company's business, has opened up increased market opportunities in the Washington, District of

Edgar Filing: MVB FINANCIAL CORP - Form 424B5

Table of Contents

Columbia metropolitan region, North Carolina and South Carolina and added diversity to the Company's earnings stream.

Our principal executive office is located at 301 Virginia Avenue, Fairmont, West Virginia 26554 and our telephone number is (304) 363-4800. The Company's Internet web site is www.mvbbanking.com. Information contained on, or that can be accessed through, our website does not constitute part of this prospectus supplement.

Additional information about us is included in our filings with the SEC, which are incorporated by reference into this prospectus. See "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus supplement.

S-9

Table of Contents

The Rights Offering

The following summary describes the principal terms of the rights offering, but is not intended to be complete. See the section of this prospectus supplement below entitled "The Rights Offering" for a more detailed description of the terms and conditions of the rights offering.

Securities Offered	We are distributing at no cost or charge to you one subscription right for each share of common stock that you owned as of 5:00 p.m., Eastern Time, on the record date, March 10, 2017, either as a holder of record or, in the case of shares held of record by brokers, custodian banks or other nominees on your behalf, as beneficial owner of the shares.
--------------------	--

Subscription Price	The subscription price per share of common stock is \$11.50.
--------------------	--

Basic Subscription Right	Subject to the 4.9% offering restriction, for each right that you own, you will have a basic subscription right to buy from us 0.04349 of a share of our common stock at the subscription price. You may exercise your basic subscription right for some or all of your subscription rights, or you may choose not to exercise your subscription rights.
--------------------------	--

Fractional shares of our common stock resulting from the exercise of the basic subscription right or the over-subscription right will be eliminated by rounding down to the nearest whole share. As a result, we may not issue the full number of shares authorized for issuance in connection with this rights offering.

Over-subscription Right	If you exercise all of your basic subscription right, you will have the opportunity to purchase all or any portion of the shares of common stock that are not purchased by other holders of subscription rights; provided that, if any over-subscription rights are exercised, we will not issue a number of shares in excess of 434,783 pursuant to the exercise of basic subscription rights and over-subscription rights. If you fully exercise your basic subscription right and other holders of subscription rights do not fully exercise their basic subscription rights, you may also exercise an over-subscription right to purchase all or any portion of the additional shares of common stock that remain unsubscribed as a result of any unexercised rights. While we reserve the right to reject in whole or in part any or all over-subscription requests regardless of the availability of shares, if sufficient shares of common stock are available, we will seek to honor your over-subscription right in full. If, however, the number of shares requested by all subscribers exceed the number of shares of common stock available to be purchased pursuant to the over-subscription right, we will allocate the available common shares among shareholders who oversubscribed by multiplying the number of shares requested by each shareholder through the exercise of their over-subscription rights by a fraction that equals (x) the number of shares available to be issued through over-subscription rights divided by (y) the total number of shares requested by all subscribers through the exercise of their over-subscription rights. We will not issue fractional shares through the exercise of over-subscription rights.
-------------------------	--

Table of Contents

	The CEO has advised the Company that he intends to exercise his over-subscription right to purchase a minimum of 100,000 Shares, inclusive of the number of shares he may purchase under his basic subscription right. As of the record date, the CEO had the basic subscription right to purchase 6,587 shares.
4.9% Rights Offering Limitation	No shareholder exercising subscription rights may thereby exceed, together with any other person with whom such shareholder's ownership may be aggregated under applicable law, 4.9% beneficial ownership of our common stock. Accordingly, no shareholder whose beneficial ownership of our common stock as of the record date, together with any other person with whom such shareholder's beneficial ownership may be aggregated under applicable law, exceeded 4.9%, may participate in the rights offering. Any rights exercised for common stock that would cause the holder to exceed the 4.9% ownership limit will not be considered exercised or subscribed for by that holder. The portion of the subscription price paid by a holder for common stock not considered subscribed for will be returned to that holder, without interest or penalty, as soon as practicable after completion of the rights offering.
Record Date	March 10, 2017
Expiration Date of Rights Offering	The subscription rights offering will expire at 5:00 p.m., Eastern Time, on March 31, 2017, unless extended. We currently do not intend to extend the expiration date.
No Minimum	There is no minimum number of rights that must be exercised or shares sold as a condition to accepting subscriptions and closing the rights offering.
Procedure for Exercising Subscription Rights	The subscription rights may be exercised at any time during the subscription period, which commences on March 13, 2017. To exercise your subscription rights, you must properly complete the enclosed subscription rights certificate and deliver it, along with the full subscription price (including any amounts in respect of an over-subscription request), to the subscription agent, Computershare Trust Company, N.A., before 5:00 p.m., Eastern Time, on March 31, 2017, unless extended. We currently do not intend to extend the expiration date.
Use of Proceeds	We intend to use the net proceeds to fund future asset growth and for general corporate purposes. See the section below entitled "Use of Proceeds."
Non-Transferability of Subscription Rights	The subscription rights may not be sold, transferred or assigned to anyone else and will not be quoted on the OTCQB or any other stock exchange or trading market.

Edgar Filing: MVB FINANCIAL CORP - Form 424B5

Table of Contents

No Revocation of Exercise by Shareholders	All exercises of subscription rights are irrevocable, even if you later learn information about us that you consider unfavorable. You should not exercise your subscription rights unless you are certain that you wish to purchase the shares of common stock offered pursuant to the rights offering.
Conditions to the Rights Offering	The completion of the rights offering is subject to the conditions described in the section below entitled "The Rights Offering Conditions and Termination."
Investment Agreement	We have entered into the Investment Agreement with the CEO. Pursuant to the Investment Agreement, in a transaction separate from the rights offering, the CEO has agreed to purchase from us that number of additional shares of common stock, if any, equal to the amount by which 100,000 exceeds the number of shares of common stock purchased by the CEO pursuant to the exercise of his basic subscription right and over-subscription right. We refer to the shares of common stock that the CEO may purchase under the Investment Agreement as the "Investor Shares". The price per share paid by the CEO for all such common stock will be equal to the subscription price of \$11.50. The CEO has agreed to not sell or otherwise transfer any Investor Shares purchased by him in excess of Shares acquired through his basic and/or any over-subscription privilege in the Rights Offering, in a public or private transaction for at least six months from the Closing Date. See "The Investment Agreement" for further information.
No Board Recommendation	Our Board of Directors is not making a recommendation regarding your exercise of the subscription rights. You are urged to make your own decision whether or not to exercise your subscription rights based on your own assessment of our business and the rights offering. See the section below entitled "Risk Factors."
Certain Material U.S. Federal Income Tax Considerations	The receipt and exercise of your subscription rights should generally not be taxable under U.S. federal income tax laws. However, you should seek specific tax advice from your personal tax advisor in light of your personal tax situation and as to the applicability and effect of any other tax laws. See the section below entitled "Certain Material U.S. Federal Income Tax Considerations."
Subscription Agent	Computershare Trust Company, N.A.
Information Agent	Georgeson LLC
Shares of Common Stock Outstanding Before the Rights Offering	As of March 10, 2017, 9,996,544 shares of our common stock were outstanding.

Table of Contents

Shares of Common Stock Outstanding After Completion of the Rights Offering	Assuming the conditions to the consummation of the transactions contemplated by the Investment Agreement are satisfied, we will issue a minimum of 434,783 shares of our common stock through the exercise of the basic subscription rights and the over-subscription rights (including shares purchased by the CEO pursuant to the exercise of those rights). If the rights offering is fully subscribed, we will issue the CEO up to a maximum of an additional 93,413 Investor Shares, and after giving effect to the rights offering and the transactions contemplated by the Investment Agreement, we will have up to a maximum of 10,524,740 shares outstanding.
Risk Factors	Shareholders considering making an investment by exercising subscription rights in the rights offering should carefully read and consider the information set forth in the section entitled "Risk Factors" beginning on page S-16 of this prospectus supplement and page 4 of the accompanying prospectus, together with the other information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus, including the information contained under the heading "Risk Factors" in our Annual Reports on Form 10-K for the year ended December 31, 2016 ("2016 Form 10-K") filed with the SEC on March 10, 2017.
Fees and Expenses	We will pay the fees and expenses related to the rights offering, which we estimate to be \$225,000.
Questions	If you have more questions about the rights offering or need additional copies of the rights offering documents, please contact the information agent, Georgeson LLC, at 866-821-0284.

Table of Contents

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated by reference herein may contain forward-looking statements, within the meaning of such term in the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act and Section 21E of the Exchange Act of 1934 (the "Exchange Act"), with respect to the financial condition, results of operations, plans, objectives, future performance and business of the Company. Forward-looking statements, which may be based upon beliefs, expectations and assumptions of the Company's management and on information available to management at the time the statements are made, are generally identifiable by the use of words such as "believe," "expect," "anticipate," "bode," "predict," "suggest," "project," "appear," "plan," "intend," "estimate," "may," "will," "would," "could," "should," "likely," or other similar expressions. Additionally, all statements in this prospectus supplement and the documents incorporated by reference herein, including forward-looking statements, speak only as of the date they are made, and, except as required by law, we undertake no obligation to update any statement in light of new information or future events.

These forward-looking statements are not guarantees of future performance, nor should they be relied upon as representing the Company's management's views as of any subsequent date. Forward-looking statements involve significant risks and uncertainties and actual results may differ materially from those presented. Factors that might cause such differences include, but are not limited to:

the ability of the Company and its subsidiaries to successfully execute business plans, manage risks, and achieve objectives;

changes in local, national and international political and economic conditions, including without limitation the political and economic effects of the recent economic crisis, delay of recovery from that crisis, economic conditions and fiscal imbalances in the United States and other countries, potential or actual downgrades in rating of sovereign debt issued by the United States and other countries, and other major developments, including wars, military actions, and terrorist attacks;

changes in financial market conditions, either internationally, nationally or locally in areas in which the Company and its subsidiaries conduct operations, including without limitation, reduced rates of business formation and growth, commercial and residential real estate development and real estate prices;

fluctuations in markets for equity, fixed-income, commercial paper and other securities, including availability, market liquidity levels, and pricing; changes in interest rates, the quality and composition of the loan and securities portfolios, demand for loan products, deposit flows and competition;

the ability of the Company and its subsidiaries to successfully conduct acquisitions and integrate acquired businesses;

potential difficulties in expanding the businesses of the Company and its subsidiaries in existing and new markets;

increases in the levels of losses, customer bankruptcies, bank failures, claims, and assessments;

changes in fiscal, monetary, regulatory, trade and tax policies and laws, and regulatory assessments and fees, including policies of the U.S. Department of Treasury, the Board of Governors of the Federal Reserve Board System (the "Federal Reserve"), and the Federal Deposit Insurance Corporation ("FDIC");

the impact of executive compensation rules under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") and banking regulations which may impact

Table of Contents

the ability of the Company and its subsidiaries, and other U.S. financial institutions to retain and recruit executives and other personnel necessary for their businesses and competitiveness;

the impact of the Dodd-Frank Act and of new international standards known as Basel III, and rules and regulations thereunder, many of which have not yet been promulgated, on our required regulatory capital and liquidity levels, governmental assessments on us, the scope of business activities in which we may engage, the manner in which the Company and its subsidiaries engage in such activities, the fees that the Company's subsidiaries may charge for certain products and services, and other matters affected by the Dodd-Frank Act and these international standards;

continuing consolidation in the financial services industry; new legal claims against the Company and its subsidiaries, including litigation, arbitration and proceedings brought by governmental or self-regulatory agencies, or changes in existing legal matters;

success in gaining regulatory approvals, when required, including for proposed mergers or acquisitions;

changes in consumer spending and savings habits;

increased competitive challenges and expanding product and pricing pressures among financial institutions;

inflation and deflation;

technological changes and the implementation of new technologies by the Company and its subsidiaries;

the ability of the Company and its subsidiaries to develop and maintain secure and reliable information technology systems;

legislation or regulatory changes which adversely affect the operations or business of the Company and its subsidiaries;

the ability of the Company and its subsidiaries to comply with applicable laws and regulations; changes in accounting policies or procedures as may be required by the Financial Accounting Standards Board or regulatory agencies; and

costs of deposit insurance and changes with respect to FDIC insurance coverage levels.

These risks and uncertainties should be considered in evaluating forward-looking statements and undue reliance should not be placed on such statements.

Table of Contents

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully read and consider the risks described below, together with the other information contained in or incorporated by reference into this prospectus supplement, including the information contained under the heading "Risk Factors" in the accompanying prospectus and in our 2016 Form 10-K and in any updates to those Risk Factors contained in our quarterly reports on Form 10-Q, before making a decision to invest in our common stock. The risks described below and in the documents referred to in the preceding sentence are not the only risks we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially and adversely affect our business operations. If any of these risks actually occurs, our business, financial condition and results of operations could suffer. In that case, the trading price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to the Rights Offering

If you do not fully exercise your basic subscription right, your interest in us may be significantly diluted. In addition, if you do not exercise your basic subscription right in full and the subscription price is less than the fair value of our common stock, then you would experience an immediate dilution of the aggregate fair value of your shares, which could be substantial.

Up to 434,783 shares of common stock are issuable in the rights offering. If you do not choose to fully exercise your basic subscription right, your percentage ownership interest in us may significantly decrease. In addition, if you exercise your basic subscription right in full but do not exercise your over-subscription right in full and other shareholders fully exercise their basic subscription right and their over-subscription right, the percentage of our common stock owned by such other shareholders will increase. For example, if you own 99,965 shares of common stock before the rights offering, or approximately 1.0% of our common stock, and you do not exercise any of your basic subscription right or over-subscription right while all other shareholders exercise their basic subscription right and over-subscription right in full, then your percentage ownership will be reduced to approximately 0.96%. In addition, if you do not exercise your basic subscription right in full and the subscription price is less than the fair value of our common stock, you would experience immediate dilution of the value of your shares relative to what your value would have been had our common stock been issued at fair value. This dilution could be substantial.

Your ownership interest could also be diluted pursuant to the Investment Agreement.

We have entered into the Investment Agreement with the CEO, under which the CEO has agreed, if applicable, to purchase the Investor Shares. The issuance of the Investor Shares will result in the dilution of your ownership interest, irrespective of whether you participate in the rights offering.

If the rights offering is fully subscribed, we will issue up to 100,000 shares to the CEO pursuant to the exercise of his basic subscription rights and over-subscription rights and, if applicable, his purchase of Investor Shares. Under such circumstances, the CEO could own approximately 2.4% of our common stock after giving effect to the foregoing transactions.

The subscription price determined for the rights offering is not an indication of the fair value of our common stock.

The subscription price is not necessarily related to our book value, net worth or any other established criteria of value and may or may not be considered the fair value of our common stock to be offered in the rights offering. You should not consider the subscription price as an indication of the value of the Company or our common stock. You should not assume or expect that, after the rights offering, our common stock will trade at or above the subscription price in any given time period. The

Table of Contents

market price of our common stock may decline during or after the rights offering, and you may not be able to sell shares of common stock purchased through the rights offering at a price equal to or greater than the subscription price. You should obtain a current quote for our common stock before exercising your subscription rights and make your own assessment of our business and financial condition, our prospects for the future and the terms of this rights offering.

Because we do not have any formal commitments from any of our shareholders to participate in the rights offering, the net proceeds we receive from the rights offering may be lower than currently anticipated.

We do not have any formal commitments from any of our shareholders to participate in the rights offering, and we cannot assure you that our other shareholders will exercise all or any part of their basic subscription right or their over-subscription right. Our CEO, however, has advised us that he intends to exercise his over-subscription right to purchase a minimum of 100,000 Shares, inclusive of the number of shares he may purchase under his basic subscription right. If our shareholders subscribe for fewer shares of our common stock than anticipated, the net proceeds we receive from the rights offering could be significantly reduced and we could incur damage to our reputation.

The rights offering may cause the price of our common stock to decline.

Depending upon the trading price of our common stock at the time of our announcement of the rights offering, the announcement of the rights offering, including the subscription price, together with the number of shares of common stock we could issue if the rights offering are completed, may result in an immediate decrease in the trading price of our common stock. This decrease may continue after the completion of the rights offering. If that occurs, the price you pay to purchase shares of our common stock in the rights offering may be at a price greater than the prevailing trading price. Further, if a substantial number of subscription rights are exercised and the holders of the shares received upon exercise of those subscription rights choose to sell some or all of those shares, the resulting sales could also depress the trading price of our common stock.

We may terminate the rights offering at any time prior to their respective expiration dates, and neither we nor the subscription agent will have any obligation to you except to return your subscription payment.

We may at our sole discretion terminate the rights offering at any time prior to the expiration of the respective offering periods. If we elect to terminate the rights offering, neither we nor the subscription agent will have any obligation with respect to the subscription rights except to return to you, without interest, penalty or deduction, as soon as practicable after termination of the applicable offering, any subscription payments. In addition, we may suffer reputational harm if the rights offering is terminated prior to the expiration date.

You will not be able to sell the shares of common stock you buy in the rights offering until the shares you elect to purchase are issued to you.

If you purchase shares in either offering, we will issue your shares as soon as practicable following the expiration of the applicable offering. If your shares are held by a broker, dealer, custodian bank or other nominee and you purchase shares, your nominee will be credited with the shares you purchase and your account will be credited by your nominee.

Until the shares of common stock you elect to purchase are issued to you, you may not be able to sell the shares subscribed for. Although we will endeavor to issue the shares as soon as practicable after completion of the applicable offering, after all necessary calculations have been completed, there may be a delay between the expiration date of the applicable offering and the time that the shares are issued. The stock price may decline between the time you decide to sell your shares and the time you are actually able to sell your shares.

Table of Contents

Because you may not revoke or change your subscription, you could be committed to buying shares above the prevailing trading price at the time the applicable offering is completed.

Once you exercise your subscription rights in the rights offering, you may not revoke or change the exercise. The trading price of our common stock may decline before the expiration of the applicable offering. If you exercise your subscription rights in the rights offering, and, afterwards, the trading price of our common stock decreases below the \$11.50 per share subscription price, you will have committed to buying shares of our common stock at a price above the prevailing trading price and could have an immediate unrealized loss. Our common stock is quoted on the OTCQB under the symbol, "MVBF," and the closing sale price of our common stock on the OTCQB on March 10, 2017 was \$13.50 per share. There can be no assurances that the trading price of our common stock will equal or exceed the subscription price at the time of exercise or at the expiration of the applicable offering period.

Because we will have broad discretion over the use of the net proceeds from the rights offering, you may not agree with how we use the proceeds.

We intend to use the net proceeds to support future asset growth and for other corporate purposes. However, we may allocate the proceeds among various specific purposes as we determine is appropriate. In addition, economic and financial market conditions may require us to allocate portions of the net proceeds for other purposes. Accordingly, you will be relying on the judgment of our management with regard to the use of proceeds from the rights offering, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used in a manner that you consider appropriate.

There is no legal obligation for our directors or senior management to subscribe for any shares in the rights offering.

Notwithstanding the Investment Agreement, none of our directors or members of senior management is legally obligated to subscribe for any shares of common stock in the rights offering. Because our directors and senior management are not required to subscribe for any shares of common stock in the rights offering, they may choose not to subscribe or to subscribe for less than the number of shares of common stock that they are entitled to purchase in the rights offering. Any failure on the part of our directors and senior management to participate significantly in the rights offering may jeopardize the likelihood of success for the rights offering and could result in damage to our reputation.

If you do not act promptly and follow the subscription instructions, your exercise of subscription rights will be rejected.

Shareholders that desire to purchase shares in the rights offering must act promptly to ensure that all required forms and payments are actually received by the subscription agent prior to the expiration date of the rights offering. If you are a beneficial owner of shares, you must act promptly to ensure that your broker, dealer, custodian bank or other nominee acts for you and that all required forms and payments are actually received by the subscription agent prior to the expiration of the rights offering period. We are not responsible if your broker, dealer, custodian bank or nominee fails to ensure that all required forms and payments are actually received by the subscription agent prior to the expiration of the rights offering period. If you fail to complete and sign the required subscription forms, deliver an incorrect payment amount or otherwise fail to follow the subscription procedures that apply to your exercise in the rights offering prior to the expiration of the rights offering period, the subscription agent may, depending on the circumstances, reject your subscription or accept it only to the extent of the payment received. Neither we nor the subscription agent undertakes to contact you concerning, or attempt to correct, an incomplete or incorrect subscription form. We have the sole discretion to

Table of Contents

determine whether the exercise of your subscription rights properly and timely follows the subscription procedures.

If you make payment of the subscription price by personal check, your check may not clear in sufficient time to enable you to purchase shares in the rights offering.

Any personal check used to pay the subscription price in the rights offering must clear prior to the expiration date of the applicable offering, and the clearing process may require five or more business days. As a result, if you choose to use a personal check to pay the subscription price, it may not clear prior to the expiration date of the applicable offering, in which event you would not be eligible to exercise your subscription rights. You may eliminate this risk by paying the subscription price by cashier's check drawn on a U.S. bank or through a wire transfer of funds. Please contact the information agent, Georgeson LLC at (866) 821-0284 for additional information regarding payment by cashier's check or for instructions on wire transferring the subscription payment.

Because the subscription rights are non-transferable, there is no market for the subscription rights.

You may not sell, transfer or assign your subscription rights to anyone else, and we do not intend to list or quote the subscription rights on the OTCQB or any other stock exchange or trading market. Because the subscription rights are non-transferable, there is no market or other means for you to directly realize any value associated with the subscription rights. You must exercise the subscription rights and acquire additional shares of our common stock to realize any value that may be embedded in the subscription rights.

Table of Contents

USE OF PROCEEDS

The net proceeds to us from the rights offering will depend on the number of subscription rights that are exercised in the rights offering, including over-subscription rights. If we issue all 434,783 shares available for the exercise in the rights offering, the net proceeds to us, after deducting estimated offering expenses, will be approximately \$4.7 million. If the rights offering is fully subscribed and the CEO purchases additional shares pursuant to the Investment Agreement, the net proceeds could increase by an amount up to approximately \$1.07 million. We estimate that the expenses of the rights offering will be approximately \$225,000.

Our receipt of the net proceeds from the rights offering will increase our equity capital, which we believe will enable us to continue to grow our assets while maintaining the regulatory capital ratios that are required to maintain a classification of well capitalized under applicable federal capital rules. The means by which we may increase our assets in the future may include:

increased lending activities and securities investments;

investment in branch expansion; and

acquisitions of other companies or lines of business.

We may also use the net proceeds for general corporate purposes, including, but not limited to:

funding loans, purchasing securities or acquiring other assets;

reducing or refinancing existing debt;

paying our general ongoing obligations and other general corporate purposes.

Pending such use, we may temporarily invest the net proceeds of the rights offering in liquid short-term securities. The precise amounts and timing of the application of proceeds will depend upon our funding requirements and the availability of other funds.

Table of Contents**PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY**

Our common stock is quoted on the OTCQB under the symbol "MVBF." The following table sets forth the high and low sales prices for our common stock for the periods indicated as reported by the OTCQB. As of March 10, 2017, the closing sale price for our common stock was \$13.50.

	High	Low
Year ending December 31, 2016:		
Fourth Quarter	\$ 13.05	\$ 11.50
Third Quarter	13.50	11.95
Second Quarter	14.00	12.06
First Quarter	13.99	9.50
Year ended December 31, 2015:		
Fourth Quarter	\$ 15.25	\$ 13.05
Third Quarter	15.64	14.35
Second Quarter	14.99	12.75
First Quarter	15.80	12.77
Year ended December 31, 2014:		
Fourth Quarter	\$ 15.70	\$ 14.25
Third Quarter	16.51	15.20
Second Quarter	16.50	15.66
First Quarter	18.00	15.59

Our common shareholders are entitled to receive dividends when and as declared by our board of directors, subject to various regulatory restrictions and the preferences that apply to any shares of preferred stock outstanding at the time. The Company began paying an annual dividend of \$0.05 per share beginning in December 2008 through December 2011. Beginning in 2012, the Company began paying a semi-annual dividend of \$0.035 per share in June and December. During the third quarter of 2015, the Company began paying a quarterly dividend. In 2013 and 2014, MVB Financial Corp. paid a semi-annual dividend of \$0.04 per share in June and \$0.04 per share in December. In 2015, the Company paid a semi-annual dividend of \$0.04 per share in June and a quarterly dividend of \$0.02 per share in September and December. The Company paid a quarterly dividend of \$0.02 per share in each of March, June, September, and December of 2016. No dividends were paid prior to 2008. The payment of dividends is subject to the restrictions set forth in the West Virginia Business Corporation Act and the limitations imposed by the Federal Reserve Board.

Dividends by the Company are dependent on the ability of MVB Bank to pay dividends to the Company. Dividends of MVB Bank are subject to the restrictions contained in W. Va. Code § 31A-4-25. That statute provides that not less than one-tenth part of the net profits of the preceding half-year (in the case of quarterly or semi-annual dividends) or the preceding two consecutive half-year periods (in the case of annual dividends) must be carried to a Bank's surplus fund until the surplus fund equals the amount of its capital stock. MVB Bank has met this provision of the statute. The prior approval of the West Virginia Commissioner of Banking is required if the total of all dividends declared by a state bank in any calendar year will exceed the bank's net profits for that year combined with its retained net profits for the preceding two years. The statute defines "net profits" as the remainder of all earnings from current operations plus actual recoveries on loans and investments and other assets after deducting all current operating expenses, actual losses and all federal and state taxes. The Company's future cash dividends will depend on its consolidated earnings, general economic conditions, financial condition of its subsidiaries and other factors generally affecting dividend policy.

Table of Contents**CAPITALIZATION**

The following table sets forth our unaudited consolidated capitalization as of December 31, 2016:

on an actual basis; and

on an "as adjusted" basis to give effect to the issuance and sale of 434,783 shares of common stock in this offering, net of estimated offering expenses.

The following data should be read in conjunction with our consolidated financial statements, the accompanying notes thereto, and "Management's Discussion and Analysis of Financial Condition and Results of Operation" in item 7 of our 2016 Form 10-K, which are incorporated herein by reference. See "Incorporation of Certain Information by Reference."

	As of December 31, 2016	
	Actual	As Adjusted
	(Dollars in thousands, except share and per share amounts)	
Shareholders' Equity:		
Preferred stock	16,334	16,334
Common stock	10,048	10,483
Paid-in capital	93,412	97,752
Treasury Stock	(1,084)	(1,084)
Retained earnings	31,192	31,192
Accumulated other comprehensive income	(4,277)	(4,277)
Total shareholders' equity	145,625	150,400

S-22

Table of Contents

THE RIGHTS OFFERING

The following describes the rights offering in general and assumes, unless specifically provided otherwise, that you are a record holder of our common stock on the record date. If you hold your shares in a brokerage account or through a dealer or other nominee, please also refer to the subsection below entitled "Notice to Brokers and Nominees" below.

Before deciding whether to exercise your subscription rights, you should carefully read this prospectus supplement and the accompanying prospectus, including the information set forth under the heading "Risk Factors" in this prospectus supplement and in the accompanying prospectus and the information that is incorporated by reference into this prospectus supplement and the accompanying prospectus, including the information set forth under the heading "Risk Factors" in our 2016 Form 10-K and in any updates of these Risk Factors contained in our quarterly reports on Form 10-Q.

The Subscription Rights

We are distributing to holders of our common stock as of 5:00 p.m., Eastern Time, on March 10, 2017, which is the record date for this rights offering, at no charge, non-transferable subscription rights to purchase shares of our common stock. You will receive one subscription right for each share of common stock you owned as of 5:00 p.m., Eastern Time, on the record date. The subscription rights will be evidenced by subscription rights certificates. Subscription rights may be exercised at any time during the subscription period, which commences on March 13, 2017, through the expiration date for the rights offering, which is 5:00 p.m., Eastern Time, on March 31, 2017, unless extended. We currently do not intend to extend the expiration date. You are not required to exercise any of your subscription rights.

Basic subscription right

Subject to the 4.9% offering restriction, each basic subscription right will entitle you to purchase 0.043490 of a share of our common stock at a subscription price of \$11.50 per whole share. You may exercise any number of your subscription rights, or you may choose not to exercise any subscription rights. We will not issue fractional shares of common stock. Fractional shares of our common stock resulting from the exercise of the basic subscription right or the over-subscription right will be eliminated by rounding down to the nearest whole share. Any excess subscription payments received by the subscription agent will be returned, without interest, penalty or deduction, as soon as practicable.

For example, if you owned 1,000 shares of our common stock as of 5:00 p.m., Eastern Time, on the record date, you would receive the same number of subscription rights and would have the right to purchase 43.49 shares of common stock (rounded down to 43 shares) for \$11.50 per share with your basic subscription right.

Over-subscription right

Subject to the 4.9% offering restriction, if you exercise your basic subscription right in full, you will also have an opportunity to subscribe to purchase all or any portion of shares that our other subscription rights holders do not purchase pursuant to their basic subscription right. The subscription price for shares purchased pursuant to the over-subscription right will be the same as the subscription price for the basic subscription right.

You may exercise your over-subscription right only if you exercise your basic subscription right in full. To determine if you have fully exercised your basic subscription right, we will consider only the basic subscription right held by you in the same capacity. For example, if you are granted subscription rights for shares of our common stock that you own individually and shares of our common stock that

Table of Contents

you own jointly with your spouse, you may exercise your over-subscription right with respect to the subscription rights you own individually, as long as you fully exercise your basic subscription right with respect to your individually owned subscription rights. You will not, however, be able to exercise the over-subscription right you have collectively with your spouse unless the basic subscription right collectively held by you and your spouse is fully exercised. You do not have to subscribe for any shares under the basic subscription right owned jointly with your spouse to exercise your individual over-subscription right.

When you complete the portion of your subscription rights certificate to exercise your over-subscription right, you will be representing and certifying that you have fully exercised your basic subscription right as to shares of our common stock that you hold in that capacity. **If you choose to exercise your over-subscription right, you must exercise it at the same time you exercise your basic subscription right in full.** We reserve the right to reject in whole or in part any or all over-subscription requests regardless of the availability of shares.

While we reserve the right to reject in whole or in part any or all over-subscription requests regardless of the availability of shares, if sufficient shares of common stock are available, we will seek to honor your over-subscription right in full. If, however, the number of shares requested by all subscribers exceed the number of shares of common stock available to be purchased pursuant to the over-subscription right, we will allocate the available common shares among shareholders who oversubscribed by multiplying the number of shares requested by each shareholder through the exercise of their over-subscription rights by a fraction that equals (x) the number of shares available to be issued through over-subscription rights divided by (y) the total number of shares requested by all subscribers through the exercise of their over-subscription rights. We will not issue fractional shares through the exercise of over-subscription rights.

Example: 10,000 shares remain unsubscribed following the exercise of all of the basic subscription rights by our shareholders. Two (2) shareholders exercised their basic subscription rights in full and have each subscribed for additional shares of our common stock pursuant to his over-subscription right. Shareholder A has subscribed for an additional 15,000 shares of our common stock. Shareholder B has subscribed for an additional 5,000 shares of our common stock. In each case the number of shares that each shareholder has subscribed for pursuant to the over-subscription right is equal to the number of shares that each has agreed to purchase by exercise of the basic subscription right. According to the over-subscription right formula above, Shareholder A and B would receive the following:

Shareholder A: $15,000 \times (10,000/20,000) = 7,500$ shares

Shareholder B: $5,000 \times (10,000/20,000) = 2,500$ shares

If there is a pro rata allocation of the remaining shares of our common stock and you would otherwise receive an allocation of a greater number of shares than you subscribed for under your over-subscription right, then, subject to our accepting your over-subscription request, we will allocate to you only the number of shares for which you over-subscribed. We will allocate the remaining shares among all other holders exercising their over-subscription right, again subject to our right to reject in whole or in part any over-subscription request. If you are not allocated the full amount of shares for which you over-subscribe, you will receive a refund of the subscription price, without interest, penalty or deduction, that you delivered for those shares of our common stock that are not allocated to you. The subscription agent will mail such refunds as soon as practicable after the completion of the offering.

Table of Contents

The 4.9% Rights Offering Restriction

No shareholder exercising subscription rights may thereby exceed, together with any other person with whom such shareholder's ownership may be aggregated under applicable law, 4.9% beneficial ownership of our common stock. **Accordingly, no shareholder whose beneficial ownership of our common stock as of the record date, together with any other person with whom such shareholder's beneficial ownership may be aggregated under applicable law, exceeded 4.9%, may participate in the rights offering.** Any rights exercised for common stock that would cause such holder to exceed the 4.9% ownership limit will not be considered exercised or subscribed for by that holder. The portion of the subscription price paid by a holder for common stock not considered subscribed for will be returned to that holder, without interest or penalty, as soon as practicable after completion of the rights offering.

Subscription Price

The subscription price was set at \$11.50 per share so that our existing shareholders would have the opportunity to purchase additional shares of our common stock at the same price as in the Private Placement.

With respect to the price in the Private Placement, based on advice from our financial advisor, KBW, and the orders placed by the institutional investors in the Private Placement, our Board of Directors concluded that the price of \$11.50 per share of common stock issued in the Private Placement was the highest price we could obtain in order to attract the amount of subscriptions necessary to raise \$22.0 million, which is the amount of capital the Board of Directors believes is appropriate in order to strengthen the Company's balance sheet, position the Company for the initiatives discussed above in "Use of Proceeds" and maintain healthy regulatory capital ratios going forward.

The subscription price is not necessarily related to our book value, net worth or any other established criteria of value and may or may not be considered the fair value of our common stock to be offered in the rights offering. You should not consider the subscription price as an indication of the value of the Company or our common stock. You should not assume or expect that, after the rights offering, our common stock will trade at or above the subscription price in any given time period. The market price of our common stock may decline during or after the rights offering, and you may not be able to sell shares of common stock purchased through the rights offering at a price equal to or greater than the subscription price. You should obtain a current quote for our common stock before exercising your subscription rights and make your own assessment of our business and financial condition, our prospects for the future and the terms of this rights offering.

We retained KBW as our financial advisor to advise us with respect to an appropriate per share price range for the securities offered in the Private Placement, for which service we paid KBW a fee of \$1.21 million upon closing of the Private Placement. KBW will not receive any fee in connection with the rights offering.

Expiration Time and Date; Amendments

The subscription rights will expire at 5:00 p.m., Eastern Time, on March 31, 2017, unless the expiration date is extended. We currently do not intend to extend the expiration date. We will notify you of any extension of the expiration date by issuing a press release. You must properly complete the enclosed subscription rights certificate and deliver it, along with the full subscription price (including any amounts in respect of an over-subscription request), to the subscription agent prior to 5:00 p.m., Eastern Time, on March 31, 2017. After the expiration of the rights offering period, all unexercised subscription rights will be null and void. We will not be obligated to honor any purported exercise of subscription rights which the subscription agent receives after the expiration of the offering, regardless

Table of Contents

of when you sent the documents regarding that exercise. Any subscription payments for shares not allocated or validly purchased will be returned to you, without interest, penalty or deduction, as soon as practicable following the expiration date of the rights offering.

We reserve the right, at our sole discretion, to amend or modify the terms of the rights offering.

Reasons for the Rights Offering

On December 6, 2016, we announced that we had entered into the Securities Purchase Agreements related to the Private Placement. The rights offering is intended to provide our existing shareholders the opportunity to purchase additional shares of our common stock at the same price as in the Private Placements. See also "Use of Proceeds."

Anticipated Proceeds From the Rights Offering

The net proceeds to us from the rights offering will depend on the number of subscription rights exercised in the rights offering, including over-subscription requests. If we issue all 434,783 shares available for the exercise of subscription rights in the rights offering, the net proceeds to us, after deducting estimated offering expenses, will be approximately \$4.7 million. If the rights offering is fully subscribed and the CEO purchases additional shares pursuant to the Investment Agreement, the net proceeds could increase by an amount of up to \$1.07 million. We estimate that the expenses of the rights offering will be approximately \$225,000.

See the section of this prospectus supplement above entitled "Use of Proceeds."

Method of Exercising Subscription Rights

The exercise of subscription rights is irrevocable and may not be cancelled or modified. You may exercise your subscription rights as follows:

Subscription by Registered Holders

To exercise your basic subscription right and your over-subscription right, you must properly complete and execute the subscription rights certificate, together with any required signature guarantees, and deliver it, together with payment in full of the subscription price for each share of our common stock you are subscribing for, including any shares you subscribe for pursuant to the over-subscription right, to the subscription agent at the address set forth below under the heading entitled " Subscription Agent," on or prior to the expiration date.

Subscription by Beneficial Owners

If you are a beneficial owner of shares of our common stock, meaning that you hold your shares in street name through a broker, custodian bank or other nominee, we will ask your broker, custodian bank or other nominee to notify you of the rights offering. If you wish to exercise your subscription rights, including both your basic subscription right and any over-subscription request, you will need to have your broker, custodian bank or other nominee act for you and exercise your subscription rights and deliver all documents and payment on your behalf prior to 5:00 p.m., Eastern Time, on March 31, 2017. If you hold certificates of our common stock directly and would prefer to have your broker, custodian bank or other nominee act for you, you should contact your nominee and request it to effect the transactions for you.

If you are not contacted by your broker, custodian bank or other nominee but believe you are entitled to subscription rights, you should promptly contact your broker, custodian bank or other nominee in order to subscribe for shares of our common stock in the rights offering. We are not

Table of Contents

responsible if you do not receive notice from your broker, custodian bank or other nominee or if you do not receive notice in time to respond to your nominee by the deadline established by the nominee.

If you wish to obtain a separate subscription rights certificate, you should contact the nominee as soon as possible and request that a separate subscription rights certificate be issued to you.

Payment Method

Payments must be made in full in United States dollars for the full number of shares for which you are subscribing by:

cashier's check drawn on a U.S. bank made payable to Computershare Trust Company, N.A. (acting as subscription agent for MVB Financial Corp.), including the shareholder name as it appears on the subscription rights card and account number as it appears on the subscription rights card; or

personal check drawn upon a U.S. bank made payable to Computershare Trust Company, N.A. (acting as subscription agent for the MVB Financial Corp.); or

wire transfer of immediately available funds to the subscription agent.

Please contact the information agent, Georgeson LLC, at (866) 821-0284 for additional information regarding payment by cashier's check or for instructions on wire transferring the subscription payment. We will not honor payment received after the expiration date of the rights offering, and the subscription agent will return your payment to you, without interest, penalty or deduction, as soon as practicable. The subscription agent will be deemed to receive payment upon:

receipt by the subscription agent of any cashier's check drawn upon a U.S. bank; or

clearance of any personal check deposited by the subscription agent; or

receipt of the wired funds.

If you elect to exercise your subscription rights, you should consider using a cashier's check drawn upon a U.S. bank (including the shareholder name as it appears on the subscription rights card and account number as it appears on the subscription rights card) or wire transfer of funds following the instructions provided by Georgeson LLC, to ensure that the subscription agent receives your funds prior to the expiration of the rights offering. If you deliver a personal check, payment will not be deemed to have been received by the subscription agent until the check has cleared. If you deliver a cashier's check drawn upon a U.S. bank or wire transfer of funds, payment will be deemed to have been received by the subscription agent immediately upon receipt of such instrument and wire transfer of funds.

If you deliver a personal check, payment will not be deemed to have been received by the subscription agent until the check has cleared.

Any personal check used to pay for shares of our common stock must clear the appropriate financial institutions prior to 5:00 p.m., Eastern Time, on March 31, 2017. The clearinghouse may require five or more business days. Accordingly, if you intend to pay the subscription payment by means of a personal check, we urge you to make payment sufficiently in advance of the expiration of the rights offering to ensure such payment is both received and cleared by such date.

You should follow the instructions included in the subscription rights certificate carefully and strictly follow them. **Do not deliver your subscription rights certificates or payments to the Company.** We will not consider your subscription received until the subscription agent has received delivery of a properly completed and duly executed subscription rights certificate and payment of the full

Table of Contents

subscription amount. You and your nominee bear the risk of delivery of all documents and payments and neither we nor the subscription agent have any responsibility for such deliveries.

The method of delivery of subscription rights certificates and payment of the subscription amount to the subscription agent will be at the risk of the holders of subscription rights. If sent by mail, we recommend that you deliver those certificates and payments by registered mail, properly insured, with return receipt requested, and that you allow a sufficient number of days to ensure delivery to the subscription agent and clearance of payment prior to the expiration of the rights offering. The clearance of a personal check may require five or more business days.

Unless a subscription rights certificate states that the shares of our common stock are to be delivered to the record holder of such rights or such certificate is submitted for the account of a bank or a broker, signatures on such subscription rights certificate must be guaranteed by an "eligible guarantor institution," as such term is defined in Rule 17Ad-15 of the Securities Exchange Act of 1934, as amended, subject to any standards and procedures adopted by the subscription agent.

Instructions for Completing Your Subscription Rights Certificate

Do not deliver subscription rights certificates or payments to us. We will not consider your subscription received until the subscription agent has received delivery of a properly completed and duly executed subscription rights certificate and payment of the full subscription amount. The risk of delivery of all documents and payments is borne by you or your nominee, not us or the subscription agent.

Validity of Subscriptions

We will resolve all questions regarding the validity and form of the exercise of your subscription rights, including time of receipt and eligibility to participate in the rights offering. Our determination will be final and binding. Once made, subscriptions and directions are irrevocable, and we will not accept any alternative, conditional or contingent subscriptions or directions. We reserve the absolute right to reject any subscriptions or directions not properly submitted or the acceptance of which would be unlawful. You must resolve any irregularities in connection with your subscriptions before the subscription period expires, unless waived by us at our sole discretion. Neither the subscription agent nor we shall be under any duty to notify you or your representative of defects in your subscriptions. A subscription will be considered accepted, subject to our right to terminate the rights offering, only when a properly completed and duly executed subscription rights certificate and any other required documents and payment of the full subscription amount have been received by the subscription agent. Our interpretations of the terms and conditions of the rights offering will be final and binding.

Missing or Incomplete Subscription Information

If you do not indicate the number of subscription rights being exercised, or do not forward full payment of the total subscription price payment for the number of subscription rights that you indicate are being exercised, then you will be deemed to have exercised your subscription rights with respect to the maximum number of subscription rights that may be exercised with the aggregate subscription price payment you delivered to the subscription agent. If your aggregate subscription price payment is greater than the amount you would owe for exercise of your basic subscription right in full, you will be deemed to have exercised your over-subscription right to purchase the maximum number of shares of our common stock that could be purchased with your over-payment. If we do not apply your full subscription price payment to your purchase of shares of our common stock, the subscription agent will return the excess amount to you by mail, without interest, penalty or deduction, as soon as practicable after the expiration date of the rights offering.

Table of Contents

Conditions and Termination

We reserve the right to terminate, extend or otherwise amend the rights offering on or prior to the expiration of the rights offering for any reason; however, we currently do not intend to extend the expiration date. We may terminate, extend or otherwise amend the rights offering, in whole or in part, if at any time before completion of the rights offering there is any judgment, order, decree, injunction, statute, law or regulation entered, enacted, amended or held to be applicable to the rights offering that in the sole judgment of our Board of Directors would or might make the rights offering or its completion, whether in whole or in part, illegal or otherwise restrict or prohibit completion of the rights offering. We may waive any of these conditions and choose to proceed with the rights offering even if one or more of these events occur. If we terminate the rights offering, we will issue a press release notifying shareholders of such termination, all affected subscription rights will expire without value, and all subscription payments received by the subscription agent will be returned, without interest, penalty or deduction, as soon as practicable after the termination of the rights offering.

Subscription Agent

Computershare Trust Company, N.A. is acting as the subscription agent for the rights offering under an agreement with us. All subscription rights certificates and payments of the subscription price, to the extent applicable to your exercise of subscription rights, must be delivered to the subscription agent as follows:

By Express Mail or Overnight Delivery:

Computershare Trust Company, N.A.
Corporate Actions Voluntary Offer
250 Royall Street, Suite V
Canton, MA 02021

By First Class Mail:

Computershare Trust Company, N.A.
Corporate Actions Voluntary Offer
P.O. Box 43011
Providence, RI 02940-3011

Payments may also be made by wire transfer of immediately available funds in accordance with the instructions provided by the information agent, Georgeson LLC.

You should direct any questions or requests for assistance concerning the method of subscribing for the shares of common stock or for additional copies of this prospectus supplement to Georgeson LLC, the information agent, at 866-821-0284.

We will pay the fees and expenses of Computershare Trust Company, N.A. We have also agreed to indemnify Computershare Trust Company, N.A. against certain liabilities in connection with the rights offering.

If you deliver subscription documents or subscription rights certificates in a manner different than that described in this prospectus supplement, then we may not honor the exercise of your subscription rights.

Fees and Expenses

We will pay all fees charged by the subscription agent and the information agent. You are responsible for paying any other commissions, fees, taxes or expenses incurred in connection with the exercise of your subscription rights. Neither the subscription agent nor we will pay such expenses.

No Minimum Condition

There is no minimum number of shares that must be subscribed for by our existing shareholders as a condition to accepting subscriptions and closing the rights offering.

Table of Contents

No Fractional Shares of Common Stock

We will not issue fractional shares of common stock. Fractional shares of our common stock resulting from the exercise of the basic subscription right or the over-subscription right will be eliminated by rounding down to the nearest whole share. Any excess subscription payments received by the subscription agent will be returned, without interest, penalty or deduction, as soon as practicable.

Notice to Brokers and Nominees

If you are a broker, custodian bank or other nominee holder that holds shares of our common stock for the account of others on the rights offering record date, you should notify the respective beneficial owners of such shares of the rights offering as soon as possible to learn their intentions with respect to exercising their subscription rights. You should obtain instructions from the beneficial owner with respect to their subscription rights, as set forth in the instructions we have provided to you for your distribution to beneficial owners. If the beneficial owner so instructs, you should complete the appropriate subscription rights certificates and submit them to the subscription agent with the proper payment. If you hold shares of our common stock for the account(s) of more than one beneficial owner, you may exercise the number of subscription rights to which all such beneficial owners in the aggregate otherwise would have been entitled had they been direct record holders of our common stock on the subscription rights offering record date.

In the case of subscription rights that you hold of record on behalf of others through the Depository Trust Company ("DTC"), those subscription rights may be exercised by instructing DTC to transfer the subscription rights from your DTC account to the subscription agent's DTC account, and by delivering to the subscription agent the required certification as to the number of shares subscribed for pursuant to the exercise of the subscription rights of the beneficial owners on whose behalf you are acting, together with payment of the full subscription price.

No Transferability of Subscription Rights

The subscription rights granted to you may be exercised only by you, and, therefore, you may not sell, transfer or assign your subscription rights to anyone else.

Segregated Account; Return of Funds

The subscription agent will hold funds received in payment for shares of the common stock in a segregated account pending completion of the rights offering. The subscription agent will hold this money until the rights offering is completed or is terminated. If the rights offering is terminated for any reason, the subscription agent will return this money to subscribers, without interest, penalty or deduction, as soon as practicable.

Issuance of Shares of Common Stock

All shares that you purchase in the rights offering will be issued in book-entry, or uncertificated, form. When issued, the shares will be registered in the name of the subscription rights holder of record. As soon as practicable after the expiration of the rights offering period, the subscription agent will arrange for issuance to each subscription rights holder of record that has validly exercised its basic subscription right, the shares of common stock purchased pursuant to the basic subscription right. Any shares purchased pursuant to the over-subscription right will be issued as soon as practicable after the expiration date of the rights offering and following the completion of any pro-rations as may be necessary in the event the over-subscription requests exceed the number of shares available to satisfy such requests.

Table of Contents

Rights of Subscribers

You will have no rights as a shareholder of our common stock until your account, or your account at your broker, custodian bank or other nominee, is credited with the shares of our common stock purchased in the rights offering. You will have no right to revoke your subscriptions after you deliver your completed subscription rights certificate, payment and any other required documents to the subscription agent.

Shareholder Agreements and Other Restrictions

You will not be subject to any shareholder agreement that restricts your ability to sell or transfer any new shares of common stock acquired by you in the rights offering. Shareholders who are directors, officers and other employees of the Company and the Bank may be subject to certain trading restrictions with respect to shares that they own or control under securities laws, the terms of our equity compensation plans and other internal corporate policies and procedures, but any of these restrictions are applicable independent of whether the shares are purchased in the rights offering.

No Revocation or Change

Once you submit the form of subscription rights certificate to exercise any subscription rights, you are not allowed to revoke or change the exercise or request a refund of monies paid. All exercises of subscription rights are irrevocable, even if you learn information about us that you consider to be unfavorable. You should not exercise your subscription rights unless you are certain that you wish to purchase the shares of common stock offered pursuant to the rights offering.

Regulatory and Other Limitations

The ability of a third party to acquire the Company is subject to applicable banking laws and regulations. The Bank Holding Company Act of 1956 (the "BHCA") and the regulations thereunder require any "bank holding company" (as defined in the BHCA) to obtain the approval of the Federal Reserve prior to acquiring more than 5% of the outstanding shares of a class of our voting stock. Any person other than a bank holding company is required to obtain prior approval of the Federal Reserve to acquire 10% or more of the outstanding shares of a class of our voting stock under the Change in Bank Control Act of 1978. Any holder of 25% or more (or between 10% and 25%, if the holder is unable to rebut the presumption that it controls the Company) of the outstanding shares of a class of our voting stock, other than an individual, is subject to supervision and regulation as a bank holding company under the BHCA. In calculating a holder's aggregate ownership of our common stock for purposes of these banking regulations, the Federal Reserve likely would include at least the minimum number of shares (and could instead include the maximum number of shares) of our common stock that a holder is entitled to receive pursuant to securities convertible into or settled in our common stock.

We will not issue shares of common stock pursuant to the exercise of basic subscription rights or over-subscription rights to any shareholder who, in our sole opinion, could be required to obtain prior clearance or approval from or submit a notice to any state or federal bank regulatory authority to acquire, own, or control such shares if, as of the expiration date of the rights offering, we determine that such clearance or approval has not been satisfactorily obtained and any required waiting period has not expired. If we elect not to issue shares in such case, such shares will become available to satisfy any over-subscription by other shareholders pursuant to subscription rights.

No Recommendation to Subscription Rights Holders

Our Board of Directors is not making a recommendation regarding your exercise of the subscription rights. You are urged to make your own decision whether or not to exercise your

Table of Contents

subscription rights based on your own assessment of our business and the rights offering. See the section entitled "Risk Factors" in this prospectus supplement, the accompanying prospectus and in any document incorporated by reference into this prospectus supplement.

Listing

The subscription rights may not be sold, transferred or assigned to anyone else and will not be listed or quoted on the OTCQB or any other stock exchange or trading market. The shares of common stock issuable upon exercise of the subscription rights will be quoted on the OTCQB under the symbol "MVBF."

Shares of Common Stock Outstanding After the Rights Offering

Based on the 9,996,544 shares of our common stock outstanding as of March 10, 2017, and assuming there are no other changes in the number of outstanding shares prior to the expiration of the rights offering, if we issue all 434,783 shares of common stock available for the exercise of the subscription rights in the rights offering, we would have 10,431,327 shares of common stock outstanding following the completion of the rights offering, which would represent an increase in the number of outstanding shares of our common stock of approximately 4.3%.

Questions about Exercising Subscription Rights

If you have any questions or require assistance regarding the method of exercising your subscription rights or requests for additional copies of this document you should contact the information agent, Georgeson LLC, at 866-821-0284.

Other Matters

We are not making the rights offering in any state or other jurisdiction in which it is unlawful to do so, nor are we distributing or accepting any offers to purchase any shares of our common stock from subscription rights holders who are residents of those states or other jurisdictions or who are otherwise prohibited by federal or state laws or regulations from accepting or exercising the subscription rights. We may delay the commencement of the rights offering in those states or other jurisdictions, or change the terms of the rights offering, in whole or in part, in order to comply with the securities laws or other legal requirements of those states or other jurisdictions. Subject to state securities laws and regulations, we also have the discretion to delay allocation and distribution of any shares you may elect to purchase by exercise of your subscription rights in order to comply with state securities laws. We may decline to make modifications to the terms of the rights offering requested by those states or other jurisdictions, in which case, if you are a resident in those states or jurisdictions or if you are otherwise prohibited by federal or state laws or regulations from accepting or exercising the subscription rights you will not be eligible to participate in the rights offering. However, we are not currently aware of any states or jurisdictions that would preclude participation in the rights offering.

Table of Contents

THE INVESTMENT AGREEMENT

We have entered into the Investment Agreement with the CEO. Pursuant to the Investment Agreement, in a transaction separate from the rights offering, the CEO has agreed to purchase from us that number of additional shares of common stock, if any, equal to the amount by which 100,000 exceeds the number of shares of common stock purchased by the CEO pursuant to the exercise of his basic subscription right and over-subscription right. We refer to the shares of common stock that the CEO may purchase under the Investment Agreement as the "Investor Shares". The price per share paid by the CEO for all such common stock will be equal to the subscription price of \$11.50.

Consummation of the purchase of the Investor Shares by the CEO is subject to usual and customary closing conditions. Resale of the Shares purchased by the CEO in connection with the Rights Offering or any Investor Shares can only be made if the company has an effective registration statement relating to such resale or by an exemption from the registration requirements (e.g. Rule 144). The CEO has agreed to not sell or otherwise transfer any Investor Shares purchased by him in excess of Shares acquired through his basic and/or any over-subscription privilege in the Rights Offering, in a public or private transaction for at least six months from the Closing Date.

S-33

Table of Contents

DESCRIPTION OF OUR COMMON STOCK

Total Authorized Capital Stock

We have the authority to issue 20,000,000 shares of common stock, \$1.00 par value per share, 20,000,000 shares of Class A common stock, \$1.00 par value per share, and 20,000 shares of preferred stock, \$1,000 par value per share. As of March 10, 2017, we had 9,996,544 shares of common stock (exclusive of shares held in treasury) issued and outstanding and no shares of Class A common stock have been issued or are outstanding.

Under our Articles of Incorporation, we previously classified (i) 8,500 shares of preferred stock as Senior Non-Cumulative Perpetual Preferred Stock, Series A, par value \$1,000 per share ("Class A Preferred"), which remain issued and outstanding as of December 12, 2016, (ii) 400 shares of preferred stock as Convertible Noncumulative Perpetual Preferred Stock, Series B ("Class B Preferred"), which remain issued and outstanding as of December 12, 2016, and (iii) 383.4 shares of preferred stock as Convertible Noncumulative Perpetual Preferred Stock, Series C ("Class C Preferred"), which remain issued and outstanding as of March 10, 2017.

Common Stock

General. The articles of incorporation and bylaws of MVB govern the Company's shareholders. The Company's shareholders have the following rights:

holders of stock are entitled to one vote for each share of stock and to receive pro rata any assets distributed to shareholders upon liquidation;

shareholders do not have preemptive rights;

shareholders have the right under West Virginia law to dissent from certain corporate transactions and to elect dissenters' rights; and

the board of directors may fill a vacancy of the board occurring during the course of the year, including a vacancy created by an increase in the number of directors.

Dividends and Dividend Rights. MVB shareholders are entitled to receive dividends when and as declared by the board of directors, subject to various regulatory restrictions and the preferences that apply to any shares of preferred stock outstanding at the time. Dividends by MVB are dependent on the ability of MVB Bank to pay dividends to MVB. Dividends of MVB Bank are subject to the restrictions contained in W. Va. Code § 31A-4-25. That statute provides that not less than one-tenth part of the net profits of the preceding half-year (in the case of quarterly or semi-annual dividends) or the preceding two consecutive half-year periods (in the case of annual dividends) must be carried to a Bank's surplus fund until the surplus fund equals the amount of its capital stock. MVB Bank has met this provision of the statute. The prior approval of the West Virginia Commissioner of Banking is required if the total of all dividends declared by a state bank in any calendar year will exceed the bank's net profits for that year combined with its retained net profits for the preceding two years. The statute defines "net profits" as the remainder of all earnings from current operations plus actual recoveries on loans and investments and other assets after deducting all current operating expenses, actual losses and all federal and state taxes.

MVB's future cash dividends will depend on its consolidated earnings, general economic conditions, financial condition of its subsidiaries and other factors generally affecting dividend policy.

Voting Rights. All voting rights with respect to MVB are vested in the holders of MVB's common stock. In the election of directors, the shareholders of MVB have the right to vote the number of shares owned by them for as many persons as there are directors to be elected, or to cumulate such shares and give a candidate as many votes as the number of directors to be elected multiplied by the

Table of Contents

number of shares they own, or to distribute them on the same principle among as many candidates as they may decide. For all other purposes, each share is entitled to one vote.

Preemptive Rights. The holders of common stock of MVB have no preemptive rights to subscribe to any additional securities which MVB may issue. If MVB should decide to issue any of its common shares in a public or private stock offering, the effect could be to dilute the percentage ownership of those shareholders before such stock offering.

Convertible Subordinated Promissory Notes. On June 30, 2014, the Company issued its Convertible Subordinated Promissory Notes Due 2024 (the "Notes") to various investors in the aggregate principal amount of \$29.4 million. At the election of a holder, any or all of the Notes may be converted into shares of MVB's common stock during the 30-day period after the first, second, third, fourth, and fifth anniversaries of the issuance of the Notes or upon a notice to prepay by the Company. The Notes convert into common stock based on a conversion price of \$16.00 per share of the Company's common stock. The conversion price is subject to anti-dilution adjustments for certain events such as stock splits, reclassifications, non-cash distributions, extraordinary cash dividends, pro rata repurchases of common stock, and business combination transactions. The Company must give 20 days' notice to the holders of the Company's intent to prepay the Notes, so that holders may execute the conversion right set forth above if a holder so desires.

Anti-Takeover Provisions

General. Certain provisions of our Articles of Incorporation, our Bylaws and the West Virginia Business Corporation Act may have the effect of impeding the acquisition of control of the Company by means of a tender offer, a proxy fight, open-market purchases or otherwise in a transaction not approved by our board of directors. These provisions may have the effect of discouraging a future takeover attempt which is not approved by our board of directors but which individual shareholders may deem to be in their best interests or in which our shareholders may receive a substantial premium for their shares over then-current market prices. As a result, shareholders who might desire to participate in such a transaction may not have an opportunity to do so. Such provisions will also render the removal of our current board of directors or management more difficult.

Articles of Incorporation; Bylaws. These provisions of our Articles of Incorporation and our Bylaws include the following:

Staggered Directors' Terms. Our directors = are elected for staggered terms of three years with approximately one-third of the directors being elected in any one year. This provision has the effect of making it more difficult and time consuming for a shareholder who has acquired or controls a majority of our outstanding common stock to gain immediate control of the board of directors or otherwise disrupt our management.

75% Vote Required to Remove Directors. Our articles of incorporation provide that holders of at least 75% of the voting power of shares entitled to vote generally in the election of directors may remove a director, with or without cause. This provision in our articles and bylaws makes it more difficult for a third party to fill vacancies created by removal with its own nominees.

Articles of Incorporation. Our articles contain supermajority provisions. The supermajority provisions in our articles of incorporation and bylaws provide that the affirmative vote of the holders of at least 75% of the outstanding shares of the Company's voting stock would be required to amend or repeal articles of incorporation provisions dealing with the classification of the board of directors, director nominations, appointment to newly created directorships, vacancies of directors, removal of directors and certain business combinations by unsolicited and unapproved third parties.

Table of Contents

Amendment of Bylaws. Our articles also require a 75% affirmative vote of the outstanding shares of the voting stock to amend the bylaws to change the number of directors, change the procedure for filling director vacancies, change the director removal process or to change the Bylaw amendment requirements.

Fair Price Provision. Our articles of incorporation contain what is known as a "fair price provision." The fair price provision requires the approval of at least 75% of our shares entitled to vote to approve transactions with an interested shareholder except in cases where either; (1) price criteria and procedural requirements are satisfied, or (2) a majority of our board of directors recommends the transaction to the shareholders. If the minimum price criteria and procedural requirements are met or the requisite approval of our board of directors are given, the normal requirements of West Virginia law would apply.

Banking Laws. The ability of a third party to acquire the Company is also subject to applicable banking laws and regulations. The Bank Holding Company Act of 1956 (the "BHCA") and the regulations thereunder require any "bank holding company" (as defined in the BHCA) to obtain the approval of the Federal Reserve prior to acquiring more than 5% of the outstanding shares of a class of our voting stock. Any person other than a bank holding company is required to obtain prior approval of the Federal Reserve to acquire 10% or more of the outstanding shares of a class of our voting stock under the Change in Bank Control Act of 1978. Any holder of 25% or more (or between 10% and 25%, if the holder is unable to rebut the presumption that it controls the Company) of the outstanding shares of a class of our voting stock, other than an individual, is subject to supervision and regulation as a bank holding company under the BHCA. In calculating a holder's aggregate ownership of our common stock for purposes of these banking regulations, the Federal Reserve likely would include at least the minimum number of shares (and could instead include the maximum number of shares) of our common stock that a holder is entitled to receive pursuant to securities convertible into or settled in our common stock.

Transfer Agent and Registrar

The transfer agent and registrar for our common shares is Computershare Trust Company, N.A.

Our common stock is listed on the OTCQB under the symbol "MVBF". For more information, see "Description of Capital Stock" in the accompanying prospectus.

Table of Contents

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a general summary of certain material U.S. federal income tax consequences that you should consider in relation to the rights offering.

General

This summary is based upon provisions of the Internal Revenue Code of 1986, as amended (the "Code"), applicable U.S. Treasury Regulations, administrative rulings, judicial authorities and other applicable existing U.S. federal income tax authorities, all of which are subject to change or differing interpretations, possibly with retroactive effect, which could result in U.S. federal income tax consequences different from those discussed below.

This summary does not provide a complete analysis of all potential tax considerations. This summary is only applicable to U.S. holders (as defined below) of our common stock who acquire the subscription rights pursuant to the terms of the rights offering, have held the common stock, as applicable, and will hold the subscription rights and any shares of common stock acquired upon the exercise of subscription rights, as capital assets (generally, property held for investment) within the meaning of Section 1221 of the Code. This summary does not deal with all tax consequences that may be relevant to holders in light of their personal circumstances or particular situations, such as holders who may be subject to special tax treatment under the Code, including (without limitation) partnerships, dealers in securities or currencies, financial institutions, insurance companies, regulated investment companies, real estate investment trusts, tax-exempt entities, trustees of qualified employee benefit plans or plan participants, or traders in securities that elect to use a mark-to-market method of accounting for their securities, persons holding subscription rights or common stock as part of a hedging, integrated or conversion transaction or a straddle, persons deemed to sell subscription rights or common stock under the constructive sale provisions of the Code, persons whose functional currency is not the U.S. dollar, investors in pass-through entities, foreign taxpayers, U.S. expatriates, certain former U.S. citizens or residents, and holders who acquired our common stock or subscription rights pursuant to the exercise of compensatory stock options or otherwise as compensation or who otherwise acquired subscription rights in a capacity other than as a holder of common stock. This summary does not deal with any federal non-income, state, local or foreign tax consequences, estate or gift tax consequences, or alternative minimum tax consequences.

As used herein, the term "U.S. holder" means a beneficial owner of common stock that is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States, including an alien individual who is a lawful permanent resident of the United States or meets the substantial presence test under Section 7701(b) of the Code; (2) a corporation or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States, any state thereof or the District of Columbia; (3) an estate the income of which is subject to U.S. federal income taxation regardless of its source; or (4) a trust, if it (i) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (ii) was in existence as of August 20, 1996 and has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

If a partnership (or entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner in the partnership should depend upon the status of the partner and the activities of the partnership. Partnerships and their partners should consult their tax advisors concerning the tax treatment of the receipt and exercise of subscription rights in the rights offering and the ownership and disposition of our common stock received on exercise of subscription rights.

Table of Contents

Distribution of Subscription Rights

Although the authorities governing transactions such as this rights offering are complex and do not directly speak to the consequences of certain aspects of the rights offering, we believe that if you own common stock on the record date for the rights offering, you should not recognize taxable income for U.S. federal income tax purposes upon receipt of the subscription rights. Under Section 305(a) of the Code, the receipt of subscription rights to acquire common stock is generally treated as a stock distribution that is a tax-free transaction to a shareholder. The general rule of non-recognition in Section 305(a) of the Code is subject to exceptions in Section 305(b) of the Code, which include "disproportionate distributions". A disproportionate distribution is a distribution or a series of distributions, including deemed distributions, that has the effect of the receipt of cash or other property by some shareholders and an increase in the proportionate interest of other shareholders in a corporation's assets or earnings and profits.

Our position regarding the tax-free treatment of the subscription rights distribution is not binding on the IRS or the courts. If this position is finally determined by the IRS or a court to be incorrect, whether on the basis that the issuance of the subscription rights is a disproportionate distribution or otherwise, the fair market value of the subscription rights would be taxable to holders of our common stock as a dividend to the extent of the holder's pro rata share of our current and accumulated earnings and profits, if any, with any excess being treated as a return of capital to the extent thereof and then as capital gain.

The remainder of this summary assumes that the receipt of the subscription rights is treated as a nontaxable stock distribution with respect to your existing shares of common stock for U.S. federal income tax purposes.

Shareholder Tax Basis and Holding Period of the Subscription Rights

In general, your tax basis in the subscription rights received in the offering should be zero. However, if either: (i) the fair market value of the subscription rights on their date of distribution is 15% or more of the fair market value on such date of the common stock with respect to which they are received; or (ii) you properly elect on your U.S. federal income tax return for the taxable year in which you receive the subscription rights to allocate part of the tax basis of such common stock to the subscription rights, then a percentage of your tax basis in our common stock with respect to which the subscription rights are received should be allocated to the subscription rights. Such percentage should equal the product of your tax basis in our common stock with respect to which the subscription rights are received and a fraction, the numerator of which is the fair market value of a subscription right and the denominator of which is the fair market value of a share of our common stock plus the fair market value of a subscription right, all as determined on the date the subscription rights are distributed. We have not obtained, and do not currently intend to obtain, an appraisal of the fair market value of the subscription rights on the date the subscription rights are distributed. In determining the fair market value of the subscription rights, you should consider all relevant facts and circumstances, including any difference between the subscription price of the subscription rights and the trading price of our common stock on the date that the subscription rights are distributed, the length of the period during which the subscription rights may be exercised and the fact that the subscription rights are non-transferable.

Your holding period with respect to the subscription rights you receive should include your holding period for the common stock with respect to which the subscription rights were distributed.

Lapse of the Subscription Rights

If you allow the subscription rights you receive to expire unexercised, you should not recognize any gain or loss on the expiration of your subscription rights, and the tax basis of the common stock you

Table of Contents

own with respect to which such subscription rights were distributed should equal the tax basis in such common stock immediately before the receipt of the subscription rights in this rights offering.

Exercise of the Subscription Rights; Tax Basis and Holding Period of Common Stock Acquired Upon Exercise

You should not recognize any gain or loss upon the exercise of your subscription rights. Your tax basis in the shares of common stock acquired through exercise of the subscription rights should be equal to the sum of the subscription price you paid to exercise the subscription rights and your tax basis in such subscription rights, if any. The holding period for the shares of common stock acquired through exercise of the subscription rights should begin on the date you exercise your subscription rights.

Distributions on Common Stock Received Upon Exercise of Subscription Rights

You should recognize ordinary income upon the receipt of any dividend or other distribution on the shares of common stock you acquire upon exercise of the subscription rights to the extent of our current or accumulated earnings and profits for the taxable year in which the distribution is made. If you are a non-corporate holder, distributions paid out of current or accumulated earnings and profits should generally be qualified dividends and under current law should be taxed at the holder's long-term capital gains tax rate, provided that the holder meets applicable holding period and other requirements. Distributions paid out of our current or accumulated earnings and profits received by corporate holders should generally be taxable at ordinary corporate tax rates, subject to any applicable dividends-received deduction. A distribution in excess of our current and accumulated earnings and profits should constitute a non-taxable return of capital to the extent of your adjusted tax basis in your shares of common stock acquired upon exercise of the subscription rights, and thereafter should constitute capital gain from the sale or other disposition of such shares of common stock.

Sale of Common Stock Acquired Upon Exercise of Subscription Rights

If you sell or otherwise dispose of shares of common stock acquired upon exercise of the subscription rights, you generally should recognize gain or loss on the transaction equal to the difference between the amount realized and your tax basis in the shares of common stock. Such gain or loss upon the sale or other disposition of the shares of common stock should be long-term or short-term capital gain or loss, depending on whether the shares of common stock have been held for more than one year. Under current law, long-term capital gains recognized by non-corporate holders are generally taxed at a preferential rate. Long-term capital gains recognized by corporations are generally taxable at ordinary corporate tax rates. Short-term capital gains of both corporate and non-corporate holders are generally taxed at a maximum rate equal to the maximum rate applicable to ordinary income. The deductibility of capital losses is subject to limitations.

Net Investment Income Tax

Certain U.S. holders that are individuals, estates or trusts are subject to an additional 3.8% Medicare tax on their net investment income. For individual U.S. holders, this additional tax generally applies to the lesser of (1) "net investment income" and (2) the excess of "modified adjusted gross income" over \$200,000 (\$250,000 if married and filing jointly or \$125,000 if married filing separately). "Net investment income" generally equals the taxpayer's gross investment income reduced by allocable deductions. Investment income generally includes dividends and capital gains.

Information Reporting and Backup Withholding

Under the backup withholding rules of the Code, you may be subject to information reporting and/or backup withholding with respect to payments of dividends on and proceeds from the sale,

Table of Contents

exchange or redemption of our shares of common stock, including those acquired through the exercise of subscription rights, unless you: (i) are a corporation or come within certain other exempt categories and, when required, demonstrate this fact; or (ii) provide a correct taxpayer identification number and certify under penalties of perjury that the taxpayer identification number is correct and that you are not subject to backup withholding because of a failure to report all dividends and interest income. Any amount withheld under these rules should be allowable as a credit against (and may entitle you to a refund with respect to) your federal income tax liability, provided that the required information is furnished to the Internal Revenue Service. We may require you to establish your exemption from backup withholding or to make arrangements satisfactory to us with respect to the payment of backup withholding.

THE FOREGOING SUMMARY IS INCLUDED FOR GENERAL INFORMATION ONLY. ACCORDINGLY, YOU ARE URGED TO CONSULT WITH YOUR OWN TAX ADVISOR WITH RESPECT TO THE PARTICULAR FEDERAL, STATE, LOCAL AND FOREIGN TAX CONSEQUENCES OF THE RECEIPT OF SUBSCRIPTION RIGHTS IN THIS OFFERING AND THE OWNERSHIP, EXERCISE AND DISPOSITION OF THE SUBSCRIPTION RIGHTS APPLICABLE TO YOUR OWN PARTICULAR TAX SITUATION.

S-40

Table of Contents

PLAN OF DISTRIBUTION

Rights Offering

On or about the date hereof, we will distribute the subscription rights, subscription rights certificates and copies of this prospectus supplement and the accompanying prospectus to individuals who owned shares of common stock of record as of 5:00 p.m., Eastern Time, on March 10, 2017, the record date for the rights offering. If you wish to exercise your subscription rights and purchase shares of common stock, you should complete the subscription rights certificate and return it with payment for the shares, to the subscription agent, Computershare Trust Company, N.A. See the subsection above entitled "The Rights Offering Method of Exercising Subscription Rights." If you have any questions, you should contact the information agent, Georgeson LLC, at 866-821-0284. The subscription rights will not be listed or quoted on the OTCQB or any other stock exchange or trading market. The shares of common stock issuable upon exercise of the subscription rights will be quoted on the OTCQB under the symbol "MVBF."

We have agreed to pay the subscription agent and information agent customary fees plus certain expenses in connection with the rights offering. We have not employed any brokers, dealers or underwriters in connection with the solicitation of exercise of subscription rights. Except as described in this section, we are not paying any other commissions, underwriting fees or discounts in connection with the rights offering. Some of our employees may solicit responses from you as a holder of subscription rights, but we will not pay our employees any commissions or compensation for these services other than their normal employment compensation. We estimate that our total expenses in connection with the rights offering will be approximately \$225,000.

LEGAL MATTERS

The validity of the subscription rights and the common stock issuable upon exercise of the subscription rights will be passed upon for us by Spilman Thomas & Battle, PLLC, Morgantown, West Virginia. Certain other legal matters not particular to the State of West Virginia will be passed upon by Squire Patton Boggs (US) LLP, counsel to MVB Financial Corp.

EXPERTS

The consolidated financial statements of MVB Financial Corp. and subsidiaries as of December 31, 2016 and 2015, and for each of the years in the three-year period ended December 31, 2016, and the effectiveness of internal control over financial reporting as of December 31, 2016, have been incorporated by reference herein in reliance upon the reports of Dixon Hughes Goodman LLP, an independent registered public accounting firm, incorporated by reference herein, and upon the authority of such firm as experts in accounting and auditing.

Table of Contents

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information that we file with it into this prospectus supplement, which means that we can disclose important information to you by referring you to other documents. The information incorporated by reference is an important part of this prospectus supplement. We incorporate by reference the following documents and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement and prior to the termination of this offering (other than information "furnished" rather than "filed" and information that is modified or superseded by subsequently filed documents prior to the termination of this offering):

Our annual report on Form 10-K for the fiscal year ended December 31, 2016 filed with the SEC on March 10, 2017; and

Our current reports on Form 8-K filed with the SEC on each of January 5, 2017, January 18, 2017, February 10, 2017 and February 24, 2017.

All filings filed by us pursuant to the Exchange Act after the date of the initial filing of the registration statement of which this prospectus supplement is a part and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus supplement.

We will provide without charge, upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus supplement and a copy of any or all other contracts or documents which are referred to in this prospectus supplement. Requests should be directed to:

MVB Financial Corp.
Attention: Corporate Secretary
301 Virginia Avenue
Fairmont, West Virginia 26554
Telephone number: (304) 367-8697

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act and file with the SEC proxy statements, Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. You may read and copy any document we file at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available to the public from the SEC's web site at www.sec.gov or on our website at www.mvbbanking.com. However, other than our available SEC filings, the information on, or that can be accessible through, our website does not constitute a part of, and is not incorporated by reference in, this prospectus supplement. Written requests for copies of the documents we file with the SEC should be directed to MVB Financial Corp., 301 Virginia Avenue, Fairmont, West Virginia 26554, Attention: Corporate Secretary, telephone: (304) 367-8697.

This prospectus supplement is part of a registration statement on Form S-3 filed by us with the SEC under the Securities Act. As permitted by the SEC, this prospectus supplement does not contain all the information in the registration statement filed with the SEC. For a more complete understanding of this offering, you should refer to the complete registration statement, including exhibits, on Form S-3 that may be obtained as described above. Statements contained in this prospectus supplement about the contents of any contract or other document are not necessarily complete. If we have filed any contract or other document as an exhibit to the registration statement or any other document incorporated by reference in the registration statement, you should read the exhibit for a more complete understanding of the contract or other document or matter involved. Each statement regarding a contract or other document is qualified in its entirety by reference to the actual contract or other document.

Table of Contents

PROSPECTUS

\$75,000,000

MVB Financial Corp.

Common Stock
Class A Common Stock
Preferred Stock
Debt Securities
Warrants
Depository Shares

From time to time we may offer to sell, in one or more series, and in any combination, the securities described in this prospectus. Such securities may be offered and sold by us in one or more offerings with a total aggregate principal amount or initial purchase price not to exceed \$75,000,000.

This prospectus describes the general terms of these securities and the general manner in which we will offer them. Each time that we offer and sell securities using this prospectus, we will provide a supplement to this prospectus that contains specific information about the securities and their terms and the manner in which we will offer them for sale. The prospectus supplement also may add or update information contained in this prospectus. You should carefully read this prospectus and any supplement to this prospectus, as well as any documents we have incorporated into this prospectus by reference, before you invest in any of these securities. References herein to "prospectus supplement" are deemed to refer to any pricing supplement or free writing prospectus describing the specific pricing or other terms of the applicable offering that we prepare and distribute.

We may offer and sell these securities through underwriters, dealers or agents, or directly to purchasers on a continuous or delayed basis. We will provide the names of any such underwriters, dealers or agents used in connection with the sale of any of these securities, as well as any fees, commissions or discounts we may pay to such underwriters, dealers or agents in connection with the sale of these securities, in the applicable prospectus supplement.

Our common stock is quoted on The OTC Bulletin Board under the symbol "MVBF." On January 8, 2016, the closing price of our common stock was \$13.50. There is no market for the other securities we may offer. Each prospectus supplement will contain information, where applicable, as to any listing of securities covered by the prospectus supplement on the OTC Bulletin Board or any securities exchange.

These securities are not bank deposits and are not insured by the Federal Deposit Insurance Corporation or any other governmental agency, nor are they obligations of, or guaranteed by, a bank. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities, in any state or jurisdiction where the offer or sale is not permitted.

Investing in our securities involves risks. See "RISK FACTORS" on page 4.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus is dated January 11, 2016.

Table of Contents

TABLE OF CONTENTS

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>1</u>
<u>MVB FINANCIAL CORP.</u>	<u>3</u>
<u>RISK FACTORS</u>	<u>4</u>
<u>USE OF PROCEEDS</u>	<u>4</u>
<u>RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS</u>	<u>4</u>
<u>DESCRIPTION OF SECURITIES WE MAY OFFER</u>	<u>5</u>
<u>DESCRIPTION OF CAPITAL STOCK</u>	<u>5</u>
<u>DESCRIPTION OF DEBT SECURITIES</u>	<u>11</u>
<u>DESCRIPTION OF WARRANTS</u>	<u>18</u>
<u>DESCRIPTION OF DEPOSITARY SHARES</u>	<u>19</u>
<u>PLAN OF DISTRIBUTION</u>	<u>21</u>
<u>LEGAL MATTERS</u>	<u>23</u>
<u>EXPERTS</u>	<u>23</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>23</u>
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	<u>24</u>

You should rely only on the information incorporated by reference or provided in this prospectus, any prospectus supplement and the registration statement. We have not authorized anyone else to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any state where the offer or sale is not permitted. You should assume that the information in this prospectus and any prospectus supplement, or incorporated by reference, is accurate only as of the dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with SEC using a "shelf" registration process. Under this shelf registration process, we may sell from time to time, in one or more offerings, on a continuous or delayed basis, any combination of the securities described in this prospectus.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. Such prospectus supplement may also add, update or change information contained or incorporated by reference in this prospectus. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you should rely on the information in the prospectus supplement. You should read this prospectus (including the documents incorporated by reference) and the applicable prospectus supplement together with the additional information referred to under the heading "Where You Can Find More Information."

Any of the securities described in this prospectus and in a prospectus supplement may be convertible or exchangeable into, or exercisable for, other securities that are described in this prospectus or will be described in a prospectus supplement, and may be issued separately, together or as part of a unit consisting of two or more securities, which may or may not be separate from one another. The securities offered hereby may include new or hybrid securities developed in the future that combine features of any of the securities described in this prospectus.

The registration statement that contains this prospectus, including the exhibits to the registration statement, also contains additional information about us and the securities offered under this prospectus. You can find the registration statement at the SEC's website or at the SEC office mentioned under the heading "Where You Can Find More Information."

Unless the context otherwise requires, references in this prospectus and the accompanying prospectus supplement to "we," "us," "our," "MVB" or the "Company" refer to MVB Financial Corp. and its subsidiaries.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents we incorporate by reference in this prospectus contain, and future oral and written statements of the Company and its management may contain, forward-looking statements, within the meaning of such term in the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934 (the "Exchange Act"), with respect to the financial condition, results of operations, plans, objectives, future performance and business of the Company. Forward-looking statements, which may be based upon beliefs, expectations and assumptions of the Company's management and on information available to management at the time the statements are made, are generally identifiable by the use of words such as "believe," "expect," "anticipate," "bode," "predict," "suggest," "project," "appear," "plan," "intend," "estimate," "may," "will," "would," "could," "should," "likely," or other similar expressions. Additionally, all statements in this prospectus and the documents we incorporate by reference in this prospectus, including forward-looking statements, speak only as of the date they are made, and, except as required by law, we undertake no obligation to update any statement in light of new information or future events.

These forward-looking statements are not guarantees of future performance, nor should they be relied upon as representing the Company's management's views as of any subsequent date. Forward-looking statements involve significant risks and uncertainties and actual results may differ materially from those presented. Factors that might cause such differences include, but are not limited to:

the ability of the Company and its subsidiaries to successfully execute business plans, manage risks, and achieve objectives;

changes in local, national and international political and economic conditions, including without limitation the political and economic effects of the recent economic crisis, delay of recovery from that crisis, economic conditions and fiscal imbalances in the United States and other countries, potential or actual downgrades in rating of sovereign debt issued by the United States and other countries, and other major developments, including wars, military actions, and terrorist attacks;

Edgar Filing: MVB FINANCIAL CORP - Form 424B5

Table of Contents

changes in financial market conditions, either internationally, nationally or locally in areas in which the Company and its subsidiaries conduct operations, including without limitation, reduced rates of business formation and growth, commercial and residential real estate development and real estate prices;

fluctuations in markets for equity, fixed-income, commercial paper and other securities, including availability, market liquidity levels, and pricing; changes in interest rates, the quality and composition of the loan and securities portfolios, demand for loan products, deposit flows and competition;

the ability of the Company and its subsidiaries to successfully conduct acquisitions and integrate acquired businesses;

potential difficulties in expanding the businesses of the Company and its subsidiaries in existing and new markets;

increases in the levels of losses, customer bankruptcies, bank failures, claims, and assessments;

changes in fiscal, monetary, regulatory, trade and tax policies and laws, and regulatory assessments and fees, including policies of the U.S. Department of Treasury, the Board of Governors of the Federal Reserve Board System (the "Federal Reserve"), and the Federal Deposit Insurance Corporation ("FDIC");

the impact of executive compensation rules under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") and banking regulations which may impact the ability of the Company and its subsidiaries, and other American financial institutions to retain and recruit executives and other personnel necessary for their businesses and competitiveness;

the impact of the Dodd-Frank Act and of new international standards known as Basel III, and rules and regulations thereunder, many of which have not yet been promulgated, on our required regulatory capital and liquidity levels, governmental assessments on us, the scope of business activities in which we may engage, the manner in which the Company and its subsidiaries engage in such activities, the fees that the Company's subsidiaries may charge for certain products and services, and other matters affected by the Dodd-Frank Act and these international standards;

continuing consolidation in the financial services industry; new legal claims against the Company and its subsidiaries, including litigation, arbitration and proceedings brought by governmental or self-regulatory agencies, or changes in existing legal matters;

success in gaining regulatory approvals, when required, including for proposed mergers or acquisitions;

changes in consumer spending and savings habits;

increased competitive challenges and expanding product and pricing pressures among financial institutions;

inflation and deflation;

technological changes and the implementation of new technologies by the Company and its subsidiaries;

Edgar Filing: MVB FINANCIAL CORP - Form 424B5

the ability of the Company and its subsidiaries to develop and maintain secure and reliable information technology systems;

legislation or regulatory changes which adversely affect the operations or business of the Company and its subsidiaries;

the ability of the Company and its subsidiaries to comply with applicable laws and regulations; changes in accounting policies or procedures as may be required by the Financial Accounting Standards Board or regulatory agencies; and

costs of deposit insurance and changes with respect to FDIC insurance coverage levels.

Table of Contents

These risks and uncertainties should be considered in evaluating forward-looking statements and undue reliance should not be placed on such statements.

MVB FINANCIAL CORP.

The Company was formed on May 29, 2003 and became a bank holding company under the laws of West Virginia on January 1, 2004, and, effective December 19, 2012, became a financial holding company. The Company features multiple subsidiaries and affiliated businesses, including MVB Bank, Inc. (the "Bank" or "MVB Bank") and its wholly-owned subsidiary MVB Mortgage and MVB Insurance, LLC ("MVB Insurance").

The Bank was formed on October 30, 1997 and chartered under the laws of the State of West Virginia. The Bank commenced operations on January 4, 1999.

During the fourth quarter of 2012, the Bank acquired Potomac Mortgage Group, Inc. ("PMG" which, following July 15, 2013, began doing business under the registered trade name "MVB Mortgage"), a mortgage company in the northern Virginia area, and fifty percent (50%) interest in a mortgage services company, Lender Service Provider, LLC ("LSP"). In the third quarter of 2013, this fifty percent (50%) interest in LSP was reduced to a twenty-five percent (25%) interest through a sale of a partial interest. MVB Mortgage has twelve mortgage only offices, located in Virginia, within the Washington, District of Columbia metropolitan area as well as North Carolina and South Carolina, and, in addition, has mortgage loan originators located at select Bank locations throughout West Virginia.

In addition to MVB Mortgage, the Company has a wholly-owned subsidiary, MVB Insurance, LLC. MVB Insurance was originally formed in 2000 and reinstated in 2005, as a Bank subsidiary. Effective June 1, 2013, MVB Insurance became a direct subsidiary of the Company. MVB Insurance offers select insurance products such as title insurance, individual insurance, commercial insurance, employee benefits insurance, and professional liability insurance.

The Company's primary business activities, through its subsidiaries, are currently community banking, mortgage banking and insurance services. As a community banking entity, the Bank offers its customers a full range of products through various delivery channels. Such products and services include checking accounts, NOW accounts, money market and savings accounts, time certificates of deposit, commercial, installment, commercial real estate and residential real estate mortgage loans, debit cards, and safe deposit rental facilities. Services are provided through our walk-in offices, automated teller machines ("ATMs"), drive-in facilities, and internet and telephone banking. Additionally, the Bank offers non-deposit investment products through an association with a broker-dealer. Since the opening date of January 4, 1999, the Bank, has experienced significant growth in assets, loans, and deposits due to overwhelming community and customer support in the Marion County and Harrison County, West Virginia markets, expansion into Monongalia and Kanawha Counties, West Virginia and, most recently, into Fairfax County, Virginia. With the acquisition of PMG, mortgage banking is now a much more significant focus, which has opened up increased market opportunities in the Washington, District of Columbia metropolitan region and added enough volume to better diversify the Company's earnings stream.

Our principal executive office is located at 301 Virginia Avenue, Fairmont, West Virginia 26554 and our telephone number is (304) 363-4800. The Company's Internet web site is www.mvbbanking.com. Information contained on, or that can be accessed through, our website does not constitute part of this prospectus.

Additional information about us is included in our filings with the SEC, which are incorporated by reference into this prospectus. See "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus.

Table of Contents

RISK FACTORS

An investment in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the specific risk factors discussed in the sections entitled "Risk Factors" contained in any applicable prospectus supplement and our filings with the SEC and incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, or any applicable prospectus supplement. If any of the risks or uncertainties described in any prospectus supplement, our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our securities could decline and you might lose all or part of your investment. This prospectus and documents incorporated by reference in this prospectus also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us.

USE OF PROCEEDS

Unless the applicable prospectus supplement states otherwise, we will use the net proceeds we receive from the sale of the securities offered hereby for general corporate purposes, which may include, among other things, supporting organic loan growth, investments in or advances to our subsidiaries, working capital, capital expenditures, stock repurchases, debt repayment or the financing of possible acquisitions. The prospectus supplement relating to a particular offering of securities by us will identify the particular use of proceeds for that offering. Until we use the net proceeds from an offering, we may place the net proceeds in temporary investments or hold the net proceeds in deposit accounts at the Company's banking subsidiary.

RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

The following table reflects our ratio of earnings to fixed charges and ratio of earnings to fixed charges and preferred stock dividends for each of the years in the five-year period ended December 31, 2014, as well as for the nine months ended September 30, 2015. For further information, please see Exhibit 12.1 (Computation of Ratio of Earnings to Fixed Charges and Preferred Stock Dividends) to the registration statement of which this prospectus forms a part.

For purposes of computing the ratios of earnings to fixed charges and earnings to fixed charges and preferred stock dividends:

earnings represent income from continuing operations before income taxes, plus fixed charges;

fixed charges, excluding interest on deposits, include interest expense (other than on deposits), the portion of net rental expense deemed to be equivalent to interest on long-term debt, discount amortization and preferred stock dividends; and

fixed charges, including interest on deposits, include all interest expense, the portion of net rental expense deemed to be equivalent to interest on long-term debt, discount amortization and preferred stock dividends.

Table of Contents

	For the nine months ended Sept. 30,		For the years ended December 31,			
	2015	2014	2013	2012	2011	2010
Ratio of earnings to fixed charges:						
Excluding interest on deposits	4.41x	1.66x	4.13x	6.35x	4.50x	3.84x
Including interest on deposits	2.11x	1.20x	1.89x	2.16x	1.75x	1.55x
Ratio of earnings to fixed charges and preferred stock dividends:						
Excluding interest on deposits	3.69x	1.46x	3.92x	5.63x	4.32x	3.84x
Including interest on deposits	1.98x	1.16x	1.86x	2.10x	1.73x	1.55x

DESCRIPTION OF SECURITIES WE MAY OFFER

This prospectus contains summary descriptions of the common stock, Class A common stock, preferred stock, debt securities, warrants and depositary shares that we may offer and sell from time to time. When one or more of these securities are offered in the future, a prospectus supplement will explain the particular terms of the securities and the extent to which these general provisions may apply. These summary descriptions and any summary descriptions in the applicable prospectus supplement do not purport to be complete descriptions of the terms and conditions of each security and are qualified in their entirety by reference to our Articles of Incorporation, as amended (our "Articles of Incorporation"), our Bylaws, as amended (our "Bylaws"), the West Virginia Business Corporation Act and any other documents referenced in such summary descriptions and from which such summary descriptions are derived. If any particular terms of a security described in the applicable prospectus supplement differ from any of the terms described in this prospectus, then the terms described in this prospectus will be deemed superseded by the terms set forth in that prospectus supplement.

We may issue securities in book-entry form through one or more depositaries, such as The Depository Trust Company, Euroclear or Clearstream, named in the applicable prospectus supplement. Each sale of a security in book-entry form will settle in immediately available funds through the applicable depository, unless otherwise stated. We will issue the securities in registered form, without coupons, although we may issue the securities in bearer form if so specified in the applicable prospectus supplement. If any securities are to be listed or quoted on a securities exchange or quotation system, the applicable prospectus supplement will say so.

DESCRIPTION OF CAPITAL STOCK

The following is a summary of the material terms, limitations, voting powers and relative rights of our capital stock as contained in our Articles of Incorporation, which is incorporated by reference herein. This summary does not purport to be a complete description of the terms and conditions of our capital stock in all respects and is subject to and qualified in its entirety by reference to our Articles of Incorporation, our Bylaws, the West Virginia Business Corporation Act and any other documents referenced in the summary descriptions and from which the summary descriptions are derived. Although we believe this summary covers the material terms and provisions of our capital stock set forth in our Articles of Incorporation, it may not contain all of the information that is important to you.

Authorized Shares of Capital Stock

We have the authority to issue 20,000,000 shares of common stock, \$1.00 par value per share, 20,000,000 shares of Class A common stock, \$1.00 par value per share, and 20,000 shares of preferred stock, \$1,000 par value per share. As of January 8, 2016, we had 8,061,921 shares of common stock (exclusive of shares held in treasury) issued and outstanding and no shares of Class A common stock have been issued or are outstanding.

Table of Contents

Under our Articles of Incorporation, we previously classified (i) 8,500 shares of preferred stock as Senior Non-Cumulative Perpetual Preferred Stock, Series A, par value \$1,000 per share ("Series A Preferred Stock"), which remain issued and outstanding as of January 8, 2016, (ii) 400 shares of preferred stock as Convertible Noncumulative Perpetual Preferred Stock, Series B ("Class B Preferred"), which remain issued and outstanding as of January 8, 2016, and (iii) 383.4 shares of preferred stock as Convertible Noncumulative Perpetual Preferred Stock, Series C ("Class C Preferred Stock"), which remain issued and outstanding as of January 8, 2016.

Common Stock

General. The articles of incorporation and bylaws of MVB govern the Company's shareholders. The Company's shareholders have the following rights:

holders of stock are entitled to one vote for each share of stock and to receive pro rata any assets distributed to shareholders upon liquidation;

shareholders do not have preemptive rights;

shareholders have the right under West Virginia law to dissent from certain corporate transactions and to elect dissenters' rights; and

the board of directors may fill a vacancy of the board occurring during the course of the year, including a vacancy created by an increase in the number of directors.

Dividends and Dividend Rights. MVB shareholders are entitled to receive dividends when and as declared by the board of directors, subject to various regulatory restrictions and the preferences that apply to any shares of preferred stock outstanding at the time. Dividends by MVB are dependent on the ability of MVB Bank to pay dividends to MVB. Dividends of MVB Bank are subject to the restrictions contained in W. Va. Code § 31A-4-25. That statute provides that not less than one-tenth part of the net profits of the preceding half-year (in the case of quarterly or semi-annual dividends) or the preceding two consecutive half-year periods (in the case of annual dividends) must be carried to a Bank's surplus fund until the surplus fund equals the amount of its capital stock. MVB Bank has met this provision of the statute. The prior approval of the West Virginia Commissioner of Banking is required if the total of all dividends declared by a state bank in any calendar year will exceed the bank's net profits for that year combined with its retained net profits for the preceding two years. The statute defines "net profits" as the remainder of all earnings from current operations plus actual recoveries on loans and investments and other assets after deducting all current operating expenses, actual losses and all federal and state taxes.

MVB's future cash dividends will depend on its consolidated earnings, general economic conditions, financial condition of its subsidiaries and other factors generally affecting dividend policy.

Voting Rights. All voting rights with respect to MVB are vested in the holders of MVB's common stock. In the election of directors, the shareholders of MVB have the right to vote the number of shares owned by them for as many persons as there are directors to be elected, or to cumulate such shares and give a candidate as many votes as the number of directors to be elected multiplied by the number of shares they own, or to distribute them on the same principle among as many candidates as they may decide. For all other purposes, each share is entitled to one vote.

Preemptive Rights. The holders of common stock of MVB have no preemptive rights to subscribe to any additional securities which MVB may issue. If MVB should decide to issue any of its common shares in a public or private stock offering, the effect could be to dilute the percentage ownership of those shareholders before such stock offering.

Class A Common Stock

We may issue up to 20,000,000 shares of Class A common stock, \$1.00 par value per share, from time to time in one or more series. Our board of directors, without further approval of our

Table of Contents

shareholders, has the authority to fix the dividend rate, redemption rights and terms, conversion terms, liquidation preferences, sinking funds, voting rights and any other rights, preferences, privileges and restrictions applicable to each series of Class A common stock, except as otherwise fixed in the Articles of Incorporation.

Subordination. Class A common stock shall be ranked junior to any preferred stock issued and outstanding, with respect to the payment of dividends and the distribution of assets in the event of any dissolution, liquidation or winding up of the Company.

Dividends and Dividend Rights. The holders of Class A common stock shall be entitled to receive, when and as declared by the Board of Directors, out of any funds legally available therefor, preferential dividends in cash, in the amounts or at the rate per annum fixed for such series, and no more. If any shares of Class A common stock are outstanding, the Company shall not pay or declare any cash dividends whatsoever on the common stock or any other class of stock ranking junior to the Class A common stock unless (i) any dividends payable on the Class A common stock of all series shall have been paid and (ii) there shall exist no default in respect of any sinking fund or purchase fund for the redemption or purchase of shares of Class A common stock of any series or such default shall have been waived by the holders of at least a majority of the then issued and outstanding shares of Class A common stock of such series by a vote at a meeting called for such purpose or by written waiver with or without a meeting.

Liquidation Rights. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the corporation, then, before any distribution or payment shall be made to the holders of the common stock or any other class of stock of the corporation ranking junior to the Class A common stock in respect of dividends or distribution of assets upon liquidation, the holders of the Class A common stock shall be entitled to be paid in full, in the event of a voluntary or involuntary liquidation, dissolution or winding up, the respective amounts fixed for such series, plus in each case a sum equal to declared and unpaid dividends thereon to the date of payment thereof.

Preferred Stock

General. We may issue up to 20,000 shares of preferred stock, \$1,000.00 par value per share, from time to time in one or more series. Our board of directors, without further approval of our shareholders, has the authority to fix the dividend rights and terms, conversion rights, voting rights, redemption rights and terms, liquidation preferences, sinking funds and any other rights, preferences, privileges and restrictions applicable to each series of preferred stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, adversely affect the voting power of the holders of our common stock.

We will describe the particular terms of any series of preferred stock being offered in the prospectus supplement relating to that series of preferred stock. Those terms may include:

the number of shares being offered;

the title and liquidation preference per share;

the purchase price;

the dividend rate or method for determining that rate;

the dates on which dividends will be paid;

whether dividends will be cumulative or noncumulative and, if cumulative, the dates from which dividends will begin to accumulate;

any applicable redemption or sinking fund provisions;

any applicable conversion provisions;

Table of Contents

whether we have elected to offer depositary shares with respect to that series of preferred stock; and

any additional dividend, liquidation and other rights and restrictions applicable to that series of preferred stock.

The shares of preferred stock will, when issued against full payment of their purchase price, be fully paid and nonassessable.

Dividend Rights. If you purchase preferred stock being offered by use of this prospectus and an applicable prospectus supplement, you will be entitled to receive, when, as and if declared by our board of directors, dividends at the rates and on the dates set forth in the prospectus supplement. Dividend rates may be fixed, variable or both. The nature, amount, rates, timing and other details of dividend rights for a series of preferred stock will be described in the applicable prospectus supplement and will be payable in preference to, or in such relation to, the dividends payable on any other class or classes or series of our stock, as described in the applicable prospectus supplement. We are subject to various regulatory policies and requirements relating to the payment of dividends, including requirements to maintain adequate capital above regulatory minimums.

Voting Rights. The voting rights of preferred stock of any series being offered will be described in the applicable prospectus supplement.

Liquidation Rights. In the event that we liquidate, dissolve or wind-up our affairs, either voluntarily or involuntarily, holders of our preferred stock will be entitled to receive liquidating distributions in the amount set forth in the applicable prospectus supplement, plus accrued and unpaid dividends, if any, before we make any distribution of assets to the holders of our common stock, Class A common stock or any junior preferred stock. If we fail to pay in full all amounts payable with respect to preferred stock being offered by us and any stock having the same rank as that series of preferred stock, the holders of the preferred stock and of that other stock will share in any distribution of assets in proportion to the full respective preferential amounts to which they are entitled. After the holders of each series of preferred stock and any stock having the same rank as the preferred stock are paid in full, they will have no right or claim to any of our remaining assets.

Redemption. The terms, if any, on which shares of a series of preferred stock being offered may be redeemed will be described in the applicable prospectus supplement. The preferred stock of a series may be redeemed in such amount or amounts, and at such time or times, if any, as may be provided in respect of that particular series of preferred stock. Preferred stock may be redeemed by the Company only to the extent legally permissible.

Conversion Rights. The applicable prospectus supplement will state the terms, if any, on which shares of a series of preferred stock being offered are convertible into shares of our common stock or another series of our preferred stock.

Description of Series A Preferred Stock. On September 6, 2011 the Company filed a Certificate of Designation establishing the terms for its Senior Non-Cumulative Perpetual Preferred Stock, Series A ("Series A Preferred Stock"), and designating 8,500 shares of preferred stock as Series A Preferred Stock, which were thereafter issued on September 8, 2011 to the United States Department of the Treasury ("Treasury") as part of the Treasury's Small Business Lending Fund program. The Series A Preferred Stock is entitled to non-cumulative dividends, payable quarterly, at a dividend rate established as a percentage of the liquidation amount that fluctuates on a quarterly basis during the first 10 quarters during which the Series A Preferred Stock is outstanding. For the tenth calendar quarter through four and one half years after issuance, the dividend rate will be fixed at between one percent (1%) and seven percent (7%) based upon the Company's qualified small business lending as further described in the Certificate of Designations for the Series A Preferred Stock. After four and one half years, or March 2016, the dividend will increase to 9% regardless of the Company's small business lending.

Table of Contents

The Series A Preferred Stock is non-voting, except in limited circumstances. In the event that the Company misses five dividend payments, whether or not consecutive, the holder of the Series A Preferred Stock will have the right, but not the obligation, to appoint a representative as an observer on the Company's Board of Directors and such right would continue until the Company had made full dividend payments for four consecutive payments thereafter. The Series A Preferred Stock may be redeemed at any time at the Company's option, at a redemption price of 100% of the liquidation amount plus accrued but unpaid dividends to the date of redemption for the current period, subject to the approval of its federal banking regulator. Partial redemptions will be permitted so long as in amounts equal to at least 25% of the number of originally issued shares of Series A Preferred Stock.

Description of Class B Preferred Stock. On June 30, 2014, the Company filed a Certificate of Designations establishing the terms for its Convertible Noncumulative Perpetual Preferred Stock, Series B ("Class B Preferred Stock"), and designating 400 shares of preferred stock as Class B Preferred Stock, which were thereafter sold in a private placement.

The Class B Preferred Stock carries an annual dividend rate of 6.0% and is convertible into shares of Company common stock within thirty days after the first, second, third, fourth and fifth anniversaries of the original issue date, based on a common stock price of \$16.00 per share, as adjusted for future corporate activities. The Class B Preferred Stock is redeemable by the Company on or after the fifth anniversary of the original issue date for Liquidation Amount, as defined therein, plus declared and unpaid dividends. Redemption is subject to any necessary regulatory approvals. In the event of liquidation of the Company, shares of Class B Preferred Stock shall be junior to creditors of the Company and to the shares of Series A Preferred Stock. Holders of Class B Preferred Stock shall have no voting rights, except for authorization of senior shares of stock, amendment to the Class B Preferred Stock, share exchanges, reclassifications or changes of control, or as required by law.

Description of Class C Preferred Stock. On June 30, 2014, the Company filed a Certificate of Designations establishing the terms for its Convertible Noncumulative Perpetual Preferred Stock, Series C ("Class C Preferred Stock"), and designating 383.4 shares of preferred stock as Class C Preferred Stock, which were thereafter sold in a private placement.

The Class C Preferred Stock carries an annual dividend rate of 6.5% and is convertible into shares of Company common stock within thirty days after the first, second, third, fourth and fifth anniversaries of the original issue date, based on a common stock price of \$16.00 per share, as adjusted for future corporate activities. The Class C Preferred Stock is redeemable by the Company on or after the fifth anniversary of the original issue date for Liquidation Amount, as defined therein, plus declared and unpaid dividends. Redemption is subject to any necessary regulatory approvals. In the event of liquidation of the Company, shares of Class C Preferred Stock shall be junior to creditors of the Company and to the outstanding shares of Series A Preferred Stock and Class B Preferred Stock. Holders of Class C Preferred Stock shall have no voting rights, except for authorization of senior shares of stock, amendment to the Class C Preferred Stock, share exchanges, reclassifications or changes of control, or as required by law.

Anti-Takeover Provisions

General. Certain provisions of our Articles of Incorporation, our Bylaws and the West Virginia Business Corporation Act may have the effect of impeding the acquisition of control of the Company by means of a tender offer, a proxy fight, open-market purchases or otherwise in a transaction not approved by our board of directors. These provisions may have the effect of discouraging a future takeover attempt which is not approved by our board of directors but which individual shareholders may deem to be in their best interests or in which our shareholders may receive a substantial premium for their shares over then-current market prices. As a result, shareholders who might desire to participate in such a transaction may not have an opportunity to do so. Such provisions will also render the removal of our current board of directors or management more difficult.

Table of Contents

Articles of Incorporation; Bylaws. These provisions of our Articles of Incorporation and our Bylaws include the following:

Staggered Directors' Terms. The directors of MVB are elected for staggered terms of three years with approximately one-third of the directors being elected in any one year. This provision has the effect of making it more difficult and time consuming for a shareholder who has acquired or controls a majority of MVB outstanding common stock to gain immediate control of the board of directors or otherwise disrupt MVB's management.

75% Vote Required to Remove Directors. MVB's articles of incorporation provide that holders of at least 75% of the voting power of shares entitled to vote generally in the election of directors may remove a director, with or without cause. This provision in MVB's articles and bylaws makes it more difficult for a third party to fill vacancies created by removal with its own nominees.

MVB's Articles of Incorporation. MVB's articles contain supermajority provisions. The supermajority provisions in MVB's articles of incorporation and bylaws provide that the affirmative vote of the holders of at least 75% of the outstanding shares of the voting stock of MVB would be required to amend or repeal articles of incorporation provisions dealing with the classification of the board of directors, director nominations, appointment to newly created directorships, vacancies of directors, removal of directors and certain business combinations by unsolicited and unapproved third parties.

Amendment of Bylaws. MVB's articles also require a 75% affirmative vote of the outstanding shares of the voting stock to amend the bylaws to change the number of directors, change the procedure for filling director vacancies, change the director removal process or to change the Bylaw amendment requirements.

Fair Price Provision. MVB's articles of incorporation contain what is known as a "fair price provision." The fair price provision requires the approval of at least 75% of MVB's shares entitled to vote to approve transactions with an interested shareholder except in cases where either; (1) price criteria and procedural requirements are satisfied, or (2) a majority of MVB's board of directors recommends the transaction to the shareholders. If the minimum price criteria and procedural requirements are met or the requisite approval of MVB's board of directors are given, the normal requirements of West Virginia law would apply.

Banking Laws. The ability of a third party to acquire the Company is also subject to applicable banking laws and regulations. The Bank Holding Company Act of 1956 (the "BHCA") and the regulations thereunder require any "bank holding company" (as defined in the BHCA) to obtain the approval of the Federal Reserve prior to acquiring more than 5% of the outstanding shares of a class of our voting stock. Any person other than a bank holding company is required to obtain prior approval of the Federal Reserve to acquire 10% or more of the outstanding shares of a class of our voting stock under the Change in Bank Control Act of 1978. Any holder of 25% or more (or between 10% and 25%, if the holder is unable to rebut the presumption that it controls the Company) of the outstanding shares of a class of our voting stock, other than an individual, is subject to supervision and regulation as a bank holding company under the BHCA. In calculating a holder's aggregate ownership of our common stock for purposes of these banking regulations, the Federal Reserve likely would include at least the minimum number of shares (and could instead include the maximum number of shares) of our common stock that a holder is entitled to receive pursuant to securities convertible into or settled in our common stock.

Table of Contents

DESCRIPTION OF DEBT SECURITIES

The following description of the debt securities sets forth certain general terms that may apply to the debt securities that we may offer under this prospectus. The debt securities may be issued as senior debt securities or subordinated debt securities. Unless otherwise specified in the applicable prospectus supplement, we will issue the senior debt securities under a senior indenture, which we will enter into with a trustee to be named in the senior indenture, and we will issue the subordinated debt securities under a subordinated indenture, which we will enter into with a trustee to be named in the subordinated indenture. These indentures are sometimes collectively referred to as the "indentures" and individually referred to as an "indenture," the "senior indenture" or the "subordinated indenture," as applicable. The form of senior indenture and the form of subordinated indenture are filed as exhibits to the registration statement of which this prospectus is a part. The trustee under each indenture is referred to as the "indenture trustee." The indentures are subject to and governed by the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"), and may be supplemented or amended from time to time. Prior to issuing any debt securities, we will select an indenture trustee for the indenture relating to the issuance of debt securities, qualify such indenture trustee under the Trust Indenture Act and execute such indenture.

The indentures give us broad authority to set the particular terms of each series of debt securities, including the right to modify certain of the terms contained in the applicable indenture. We will describe the specific terms of a series of debt securities and the extent, if any, to which the specific terms of the debt securities modify the terms of the applicable indenture in the prospectus supplement relating to the debt securities.

This summary is subject to, and qualified in its entirety by reference to, the indentures, which contain the full legal text of the matters described in this section, and the description of the specific terms of the debt securities in the applicable prospectus supplement. The following summary is not complete. You should read all of the provisions of the indentures, including the definitions of certain terms.

Since we are a holding company, our right, and accordingly, the right of our creditors and shareholders, including the holders of the securities offered by this prospectus and any prospectus supplement, to participate in any distribution of assets of any of our subsidiaries upon its liquidation, reorganization or similar proceeding is subject to the prior claims of creditors of that subsidiary, except to the extent that our claims as a creditor of the subsidiary may be recognized.

Terms of the Securities

The debt securities will not be secured by any of our assets. Neither the indentures nor the debt securities will limit or otherwise restrict the amounts of other indebtedness that we may incur, or the amount of other securities that we may issue. The indentures do not limit the principal amount of any particular series of debt securities. All of the debt securities issued under each of the indentures will rank equally and ratably with any additional debt securities issued under the same indenture. The subordinated debt securities will be subordinated as described below under "Subordination."

Each prospectus supplement will specify the particular terms of the debt securities offered. The applicable prospectus supplement will describe the terms of any debt securities being offered, including the following, as may be applicable:

the title of the debt securities;

the principal amount being offered and, if a series, the total amount authorized and the total amount outstanding;

any limit on the aggregate principal amount of the debt securities;

Table of Contents

the priority of payments on the debt securities;

the issue price or prices (which may be expressed as a percentage of the aggregate principal amount) of the debt securities;

the date or dates, or the method of determining the dates, on which the debt securities will mature;

the interest rate or rates of the debt securities, or the method of determining those rates;

the interest payment dates, the dates on which payment of any interest will begin and the regular record dates;

if other than the entire principal amount, the portion of the principal amount of the debt securities that will be payable if the maturity date of the debt securities is accelerated;

any event of default applicable to the debt securities;

any covenants included for the benefit of the holders of the debt securities;

provisions, if any, restricting the declaration of dividends or requiring the maintenance of any asset ratio or the creation or maintenance of reserves;

provisions relating to modification of the terms of the debt securities or the rights of holders of the debt securities;

provisions, if any, restricting the incurrence of additional debt or the issuance of additional securities;

restrictions, if any, on transfer, sale or other assignment of the debt securities;

whether the debt securities will be issuable in temporary or permanent global form and, if so, the identity of the depository for such global security, or the manner in which any interest payable on a temporary or permanent global security will be paid;

any terms relating to the conversion of the debt securities into our common shares or preferred shares, including, without limitation, the time and place at which such debt securities may be converted, the conversion price and any adjustments to the conversion price and any other provisions that may be applicable;

any sinking fund or similar provisions applicable to the debt securities;

any mandatory or optional redemption, repurchase or repayment provisions applicable to the debt securities;

Edgar Filing: MVB FINANCIAL CORP - Form 424B5

the denomination or denominations in which the debt securities are authorized to be issued;

whether any of the debt securities will be issued in bearer form and, if so, any limitations on issuance of such bearer securities (including exchanges for registered securities of the same series);

information describing any book-entry features of the debt securities;

whether any of the debt securities will be issued as "original issue discount" securities;

the place of payment on the debt securities;

each office or agency where the debt securities may be presented for registration of transfer, exchange or conversion;

the method of determining the amount of any payments on the securities which are linked to an index or determined by a formula;

Table of Contents

if other than United States dollars, the currency or currencies in which payments on the debt securities will be payable, and whether the holder may elect payment to be made in a different currency;

the identity of the indenture trustee, the nature of any material relationship between us or our affiliates and the indenture trustee, the percentage of debt securities of a series necessary to require the indenture trustee to take action, and what indemnification the indenture trustee may require before proceeding to take action;

if other than the indenture trustee, the identity of the registrar and/or paying agent;

any defeasance of certain obligations by us pertaining to the series of debt securities;

a discussion of any material United States federal income tax considerations applicable to the debt securities; and

any other terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any terms that may be required by us or advisable under applicable laws or regulations or in connection with the marketing of the debt securities.

Some of our debt securities may be issued as "original issue discount" securities. Original issue discount securities bear no interest or bear interest at below-market rates and will be sold at a discount below their stated principal amount. The prospectus supplement will also contain any special tax, accounting or other information relating to original issue discount securities or relating to certain other kinds of securities that may be offered, including securities linked to an index.

Acceleration of Maturity

If an event of default with respect to any outstanding series of senior debt securities (and, in certain cases, subordinated debt securities) occurs and is continuing, the indenture trustee or the holders of at least 25% in principal amount of the outstanding debt securities of that series may declare the principal amount due and payable immediately by providing written notice of such acceleration to us, and, if notice is given by the holders instead of the indenture trustee, to the indenture trustee. Subject to certain conditions, the declaration of acceleration may be rescinded, and past defaults (except uncured payment defaults and certain other specified defaults) may be waived, by the holders of not less than a majority of the principal amount of debt securities of that series.

You should refer to the prospectus supplement relating to each series of debt securities for the particular provisions relating to acceleration of maturity upon the occurrence and continuation of an event of default.

Registration and Transfer

Unless otherwise indicated in the applicable prospectus supplement, each series of the offered debt securities will be issued in registered form only, without coupons. The indentures will also allow us to issue the securities in bearer form only, or in both registered and bearer form. Any securities issued in bearer form will have interest coupons attached, unless they are issued as zero coupon securities. Securities in bearer form will not be offered, sold, resold or delivered in connection with their original issuance in the United States or to any United States person other than to offices of certain United States financial institutions located outside the United States.

Unless otherwise indicated in the applicable prospectus supplement, the debt securities we are offering will be issued in denominations of \$1,000 or an integral multiple of \$1,000. No service charge will be made for any transfer or exchange of the debt securities, but we may require payment of an amount sufficient to cover any tax or other governmental charge payable in connection with a transfer or exchange.

Table of Contents

Payment and Paying Agent

We will pay principal, interest and any premium on fully registered debt securities in the designated currency or currency unit at the office of a designated paying agent. At our option, payment of interest on fully registered debt securities may also be made by check mailed to the persons in whose names the debt securities are registered on the days specified in the indentures or any prospectus supplement.

We will pay principal, interest and any premium on bearer debt securities in the designated currency or currency unit at the office of a designated paying agent or agents outside of the United States. Payments will be made at the offices of the paying agent in the United States only if the designated currency is United States dollars and payment outside of the United States is illegal or effectively precluded. If any amount payable on a debt security or coupon remains unclaimed at the end of two years after such amount became due and payable, the paying agent will release any unclaimed amounts, and the holder of the debt security or coupon will look only to us for payment.

Global Securities

The debt securities of a series may be issued in whole or in part in the form of one or more global certificates ("Global Securities") that will be deposited with a depository that we will identify in a prospectus supplement. Global Securities may be issued in either registered or bearer form and in either temporary or permanent form. All Global Securities in bearer form will be deposited with a depository outside the United States. Unless and until it is exchanged in whole or in part for individual certificates evidencing debt securities in definitive form represented thereby, a Global Security may not be transferred except as a whole by the depository to a nominee of that depository or by a nominee of that depository to a depository or another nominee of that depository.

The specific terms of the depository arrangements for each series of debt securities will be described in the applicable prospectus supplement.

Modification and Waiver

Each indenture provides that modifications and amendments may be made by us and the indenture trustee with the consent of the holders of a majority in principal amount of the outstanding debt securities of each series affected by the amendment or modification. However, no modification or amendment may, without the consent of each holder affected:

change the stated maturity date of the debt security;

reduce the principal amount, any rate of interest, or any additional amounts in respect of any debt security, or reduce the amount of any premium payable upon the redemption of any debt security;

change the time or place of payment, currency or currencies in which any debt security or any premium or interest thereon is payable;

impair the holders' rights to institute suit for the enforcement of any payment on or after the stated maturity date of any debt security or, in the case of redemption, on or after the redemption date;

reduce the percentage in principal amount of the outstanding debt securities required to consent to any modification, amendment or waiver under the indenture;

modify, except under limited circumstances, any provision of the applicable indenture relating to modification and amendment of the indenture, waiver of compliance with conditions and defaults thereunder or the right of a majority of holders to take action under the applicable indenture;

adversely affect any rights of conversion;

Table of Contents

in the case of the subordinated indenture, alter the provisions regarding subordination of the subordinated debt securities, in any way that would be adverse to the holders of those securities; or

reduce the principal amount of original issue discount debt securities which could be declared due and payable upon an acceleration of their maturity.

The holders of a majority in principal amount of the outstanding debt securities of any series may waive compliance by us and the indenture trustee with certain provisions of the indentures. The holders of a majority in principal amount of the outstanding debt securities of any series may waive any past default under the applicable indenture with respect to that series, except a default in the payment of the principal, or any premium, interest, or additional amounts payable on a debt security of that series or in respect of a covenant or provision which under the terms of the applicable indenture cannot be modified or amended, without the consent of each affected holder.

With the indenture trustee, we may modify and amend any indenture without the consent of any holder for any of the following purposes:

to name a successor entity to us;

to add to our covenants for the benefit of the holders of all or any series of debt securities;

to add to the events of default;

to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issue, authentication and delivery of securities, as set forth in the applicable indenture;

to establish the form or terms of debt securities of any series and any related coupons;

to provide for the acceptance of appointment by a successor indenture trustee;

to make provision for the conversion rights of the holders of the debt securities in certain events;

to cure any ambiguity, defect or inconsistency in the applicable indenture, provided that such action is not inconsistent with the provisions of that indenture and does not adversely affect the interests of the applicable holders; or

to modify, eliminate or add to the provisions of any indenture to conform our or the indenture trustee's obligations under the applicable indenture to the Trust Indenture Act.

Calculation of Outstanding Debt Securities

To calculate whether the holders of a sufficient principal amount of the outstanding securities have given any request, demand, authorization, direction, notice, consent or waiver under any indenture:

in the case of original issue discount securities, the principal amount that may be included in the calculation is the amount of principal that would be declared to be due and payable upon a declaration of acceleration according to the terms of that original issue discount security as of the date of the calculation; and

any debt securities owned by us, or owned by any other obligor of the debt securities or any affiliate of ours or of any other obligor, should be disregarded and deemed not to be outstanding for purposes of the calculation.

Additional Provisions

Other than the duty to act with the required standard of care during an event of default, the indenture trustee is not obligated to exercise any of its rights or powers under the applicable indenture at the request or direction of any of the holders of the debt securities, unless the holders have offered

Table of Contents

the indenture trustee reasonable indemnification. Each indenture provides that the holders of a majority in principal amount of outstanding debt securities of any series may, in certain circumstances, direct the time, method and place of conducting any proceeding for any remedy available to the indenture trustee, or exercising any trust or other power conferred on the indenture trustee.

No holder of a debt security of any series will have the right to institute any proceeding for any remedy under the applicable indenture, unless:

the holder has provided the indenture trustee with written notice of a continuing event of default regarding the holder's series of debt securities;

the holders of at least 25% in principal amount of the outstanding debt securities of a series have made a written request to the indenture trustee, and offered indemnity satisfactory to the indenture trustee, to institute a proceeding for remedy;

the indenture trustee has failed to institute the proceeding within 60 days after its receipt of such notice, request and offer of indemnity; and

the indenture trustee has not received any direction during such 60-day period inconsistent with such request from the holders of a majority in principal amount of the outstanding debt securities of that series.

However, the holder of any debt security will have an absolute and unconditional right to receive payment of the principal, any premium, any interest or any additional amounts in respect of such debt security on or after the date expressed in such debt security and to institute suit for the enforcement of any such payment.

We are required to file annually with the indenture trustee a certificate of no default, or specifying any default that exists.

Conversion Rights

The applicable prospectus supplement relating to any convertible debt securities will describe the terms on which those securities are convertible.

Events of Default

The following will be events of default under the senior indenture with respect to the senior debt securities of a series:

failure to pay any interest or any additional amounts on any senior debt security of that series when due, and continuance of such default for 30 days;

failure to pay principal of, or any premium on, any senior debt security of that series when due;

failure to deposit any sinking fund payment for a senior debt security of that series when due;

failure to perform any of our other covenants or warranties in the senior indenture or senior debt securities (other than a covenant or warranty included in that indenture solely for the benefit of a different series of senior debt securities), which has continued for 90 days after written notice as provided in the senior indenture;

acceleration of indebtedness in a principal amount in excess of \$25,000,000 for money borrowed by us, and the acceleration is not annulled, or the indebtedness is not discharged, within a specified period after written notice is given according to the

senior indenture;

certain events in bankruptcy, insolvency or reorganization of us or the Bank; and

any other event of default regarding that series of senior debt securities.

Table of Contents

The following will be events of default under the subordinated indenture with respect to the subordinated debt securities of a series:

failure to pay any interest on any subordinated debt security of that series or any coupon pertaining thereto when due, and continuance of such default for 30 days;

failure to pay principal of, or any premium on, any subordinated debt security of that series when due;

failure to deposit any sinking fund payment for a subordinated debt security of that series when due;

certain events in bankruptcy, insolvency or reorganization of us or the Bank; and

any other event of default regarding that series of subordinated debt securities.

There is no right of acceleration of the payment of principal or interest of a series of subordinated debt securities upon a default in the performance of any covenant or agreement in the subordinated debt securities of a particular series or in the applicable indenture. Except in the event of a receivership, insolvency, liquidation, or similar proceeding, there is no right of acceleration of the payment of principal or interest of a series of subordinated debt securities upon an event of default. In the event of a default in the payment of interest or principal, the holders of senior indebtedness will be entitled to be paid in full before any payment can be made to holders of subordinated debt securities. However, a holder of a subordinated debt security (or the indenture trustee under the applicable indenture on behalf of all of the holders of the affected series) may, subject to certain limitations and conditions, seek to enforce overdue payments of interest or principal on the subordinated debt securities.

Subordination

The senior debt securities will be unsecured and will rank equally among themselves and with all of our other unsecured and unsubordinated debt, if any.

The subordinated debt securities will be unsecured and will be subordinate and junior in right of payment, to the extent and in the manner set forth below, to the prior payment in full of all of the Company's senior indebtedness, as more fully described in the applicable prospectus supplement.

If any of the following circumstances has occurred, payment in full of all principal, premium, if any, and interest must be made or provided for with respect to all outstanding senior indebtedness before we can make any payment or distribution of principal, premium, if any, or interest on the subordinated debt securities:

any insolvency, bankruptcy, receivership, liquidation, reorganization or other similar proceeding relating to us or to our property has been commenced;

any voluntary liquidation, dissolution or other winding up relating to us has been commenced, whether or not such event involves our insolvency or bankruptcy;

any of our subordinated debt securities of any series is declared or otherwise becomes due and payable before its maturity date because of any event of default under the subordinated indenture, provided that such declaration has not been rescinded or annulled as provided in the subordinated indenture; or

any default with respect to senior indebtedness which permits its holders to accelerate the maturity of the senior indebtedness has occurred and is continuing, and either (a) notice of such default has been given to us and to the indenture trustee and judicial proceedings are commenced in respect of such default within 180 days after notice in the case of a default in the

Table of Contents

payment of principal or interest, or within 90 days after notice in the case of any other default, or (b) any judicial proceeding is pending with respect to any such default.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of debt securities, preferred stock, common stock, other securities of the Company or any combination of the foregoing. Warrants may be issued alone or together with securities offered by any prospectus supplement and may be attached to, or separate from, those securities. The particular terms of any warrants will be described more specifically in the prospectus supplement relating to such warrants.

The prospectus supplement relating to any warrants we are offering will include specific terms relating to the offering. We will file the form of any warrant agreement with the SEC, and you should read the warrant agreement for provisions that may be important to you. The prospectus supplement will include some or all of the following information:

the title and specific designation of the warrants;

the aggregate number of warrants offered;

the amount of warrants outstanding, if any;

the designation, number and terms of the securities purchasable upon exercise of the warrants, and procedures that will result in the adjustment of those numbers;

the exercise price or prices of the warrants;

the dates or periods during which the warrants are exercisable;

the designation and terms of any securities with which the warrants are issued;

if the warrants are issued as a unit with another security, the date, if any, on and after which the warrants and the other security will be separately transferable;

if the exercise price is not payable in U.S. dollars, the foreign currency, currency unit or composite currency in which the exercise price is denominated;

any minimum or maximum amount of warrants that may be exercised at any one time;

the anti-dilution provisions of the warrants, if any;

if applicable, the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;

Edgar Filing: MVB FINANCIAL CORP - Form 424B5

any terms, procedures and limitations relating to the transferability, exchange or exercise of the warrants; and

any other material terms of the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding-up, or to exercise voting rights, if any.

Table of Contents

DESCRIPTION OF DEPOSITARY SHARES

This following is a summary of the general terms of the deposit agreement to govern any depositary shares we may offer representing fractional interests in shares of our preferred stock, the depositary shares themselves and the related depositary receipts. This summary does not purport to be complete in all respects and is subject to and qualified entirely by reference to the relevant deposit agreement and depositary receipt with respect to the depositary shares relating to any particular series of preferred stock. The specific terms of any depositary shares we may offer will be described in the applicable prospectus supplement. If so described in the applicable prospectus supplement, the terms of that series of depositary shares may differ from the general description of terms presented below.

General

We may offer fractional interests in shares of our preferred stock, rather than full shares of preferred stock. If we do, we will provide for the issuance by a depositary to the public of receipts for depositary shares, each of which will represent a fractional interest in a share of a particular series of preferred stock.

The shares of any series of preferred stock underlying the depositary shares will be deposited under a separate deposit agreement between us and a bank or trust company having its principal office in the U.S. and having a combined capital and surplus of such amount as may be set forth in the applicable prospectus supplement, which we refer to in this section as the depositary. We will name the depositary in the applicable prospectus supplement. Subject to the terms of the deposit agreement, each owner of a depositary share will have a fractional interest in all the rights and preferences of the preferred stock underlying the depositary share. Those rights include any dividend, voting, redemption, conversion and liquidation rights.

The depositary shares will be evidenced by depositary receipts issued under the deposit agreement. If you purchase fractional interests in shares of the related series of preferred stock, you will receive depositary receipts as described in the applicable prospectus supplement.

Unless we specify otherwise in the applicable prospectus supplement, you will not be entitled to receive the whole shares of preferred stock underlying the depositary shares.

Dividend Rights

The depositary will distribute all cash dividends or other cash distributions in respect of the preferred stock underlying the depositary shares to each record holder of depositary shares based on the number of the depositary shares owned by that holder on the relevant record date. The depositary will distribute only that amount which can be distributed without attributing to any holder of depositary shares a fraction of one cent, and any balance not so distributed will be added to and treated as part of the next sum received by the depositary for distribution to record holders of depositary shares.

If there is a distribution other than in cash, the depositary will distribute property to the entitled record holders of depositary shares, unless the depositary determines that it is not feasible to make that distribution. In that case the depositary may, with our approval, adopt the method it deems equitable and practicable for making that distribution, including any sale of property and distribution of the net proceeds from this sale to the applicable holders.

The deposit agreement will also contain provisions relating to how any subscription or similar rights offered by us to holders of the preferred stock will be made available to the holders of depositary shares.

Table of Contents

Voting Rights

When the depositary receives notice of any meeting at which the holders of the preferred stock may vote, the depositary will mail information about the meeting contained in the notice, and any accompanying proxy materials, to the record holders of the depositary shares relating to the preferred stock. Each record holder of such depositary shares on the record date, which will be the same date as the record date for the preferred stock, will be entitled to instruct the depositary as to how the preferred stock underlying the holder's depositary shares should be voted.

Conversion or Exchange Rights

If any series of preferred stock underlying the depositary shares is subject to conversion or exchange, the applicable prospectus supplement will describe the rights or obligations of each record holder of depositary receipts to convert or exchange the depositary shares.

Redemption

If the series of the preferred stock underlying the depositary shares is subject to redemption, all or a part of the depositary shares will be redeemed from the redemption proceeds of that series of the preferred stock held by the depositary. The redemption price per depositary share will bear the same relationship to the redemption price per share of preferred stock that the depositary share bears to the underlying preferred stock. Whenever we redeem preferred stock held by the depositary, the depositary will redeem, as of the same redemption date, the number of depositary shares representing the preferred stock redeemed. If less than all the depositary shares are to be redeemed, the depositary shares to be redeemed will be selected by lot or pro rata as determined by the depositary.

After the date fixed for redemption, the depositary shares called for redemption will no longer be outstanding. When the depositary shares are no longer outstanding, all rights of the holders will cease, except the right to receive money or other property that the holders of the depositary shares were entitled to receive upon the redemption. Payments will be made when holders surrender their depositary receipts to the depositary.

Taxation

Owners of depositary shares will be treated for U.S. federal income tax purposes as if they were owners of the preferred stock represented by the depositary shares. If necessary, the applicable prospectus supplement will provide a description of U.S. federal income tax consequences relating to the purchase and ownership of the depositary shares and the preferred stock represented by the depositary shares.

Amendment and Termination of the Deposit Agreement

The form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement may be amended by agreement between us and the depositary at any time. However, certain amendments as specified in the applicable prospectus supplement will not be effective unless approved by the record holders of at least a majority of the depositary shares then-outstanding. A deposit agreement may be terminated by us or the depositary only if:

all outstanding depositary shares relating to the deposit agreement have been redeemed; or

there has been a final distribution on the preferred stock of the relevant series in connection with our liquidation, dissolution or winding up of our business and the distribution has been distributed to the holders of the related depositary shares.

Table of Contents

Charges of Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will pay associated charges of the depositary for the initial deposit of the preferred stock and any redemption of the preferred stock. Holders of depositary shares will pay transfer and other taxes and governmental charges and any other charges that are stated to be their responsibility in the deposit agreement.

Resignation and Removal of Depositary

The depositary may resign at any time by delivering notice to us. We may also remove the depositary at any time. Resignations or removals will take effect when a successor depositary is appointed and it accepts the appointment.

PLAN OF DISTRIBUTION

We may sell the securities covered by this prospectus from time to time at market prices prevailing at the time of sale, at prices related to such prevailing market prices at the time of sale, at negotiated prices or at fixed prices, which may change from time to time. We may sell the securities directly to one or more purchasers, through agents, to dealers, through underwriters, brokers or dealers, or through a combination of any of these sales methods or through any other method permitted by law (including in "at the market" equity offerings as defined in Rule 415 of the Securities Act). We reserve the right to accept or reject, in whole or in part, any proposed purchase of securities, whether the purchase is to be made directly or through agents.

Each time that we use this prospectus to sell our securities, we will also provide a prospectus supplement, if required, that contains the specific terms of the offering, including:

the name or names of the underwriters, dealers or agents, if any, and the types and amounts of securities underwritten or purchased by each of them;

the public offering price of the securities and the proceeds we will receive from the sale;

any over-allotment options under which underwriters may purchase additional securities from us;

any agency fees or underwriting discounts or other items constituting agents' or underwriters' compensation;

any discounts, commissions or concessions allowed or reallocated or paid to dealers; and

any securities exchange or market on which the securities may be listed.

Only underwriters that we have named in a prospectus supplement will be underwriters of the securities offered by that prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

Table of Contents

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the applicable prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we may offer, other than common stock or other outstanding securities, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Under the securities laws of some states, to the extent applicable, the securities may be sold in such states only through registered or licensed brokers or dealers. In addition, if our common stock is not listed on a national securities exchange, in some states the securities may not be sold unless such securities have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

Table of Contents

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, certain legal matters with respect to the common stock, Class A common stock and preferred stock will be passed upon for us by Patrick R. Esposito II, our Senior Vice President, Chief Legal & Risk Officer, Fairmont, West Virginia, and certain legal matters with respect to the debt securities, warrants and depositary shares will be passed upon for us by Squire Patton Boggs (US) LLP, Cincinnati, Ohio. If the securities are being distributed in an underwritten offering, certain legal matters will be passed upon for the underwriters by counsel identified in the related prospectus supplement.

EXPERTS

The consolidated financial statements of MVB Financial Corp. appearing in its Annual Report on Form 10-K, as of December 31, 2014 and for the year then ended, and the effectiveness of its internal control over financial reporting as of December 31, 2014, have been audited by Dixon Hughes Goodman LLP, independent registered public accounting firm, as set forth in its reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of MVB Financial Corp. appearing in its Annual Report on Form 10-K, as of December 31, 2013 and for the year then ended have been audited by S.R. Snodgrass, P.C., independent registered public accounting firm, as set forth in its report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act and file with the SEC proxy statements, Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. You may read and copy any document we file at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available to the public from the SEC's web site at www.sec.gov or on our website at www.mvbbanking.com. However, other than our available SEC filings, the information on, or that can be accessible through, our website does not constitute a part of, and is not incorporated by reference in, this prospectus. Written requests for copies of the documents we file with the SEC should be directed to MVB Financial Corp., 301 Virginia Avenue, Fairmont, West Virginia 26554, Attention: Corporate Secretary, telephone: (304) 367-8697.

This prospectus is part of a registration statement on Form S-3 filed by us with the SEC under the Securities Act. As permitted by the SEC, this prospectus does not contain all the information in the registration statement filed with the SEC. For a more complete understanding of this offering, you should refer to the complete registration statement, including exhibits, on Form S-3 that may be obtained as described above. Statements contained in this prospectus about the contents of any contract or other document are not necessarily complete. If we have filed any contract or other document as an exhibit to the registration statement or any other document incorporated by reference in the registration statement, you should read the exhibit for a more complete understanding of the contract or other document or matter involved. Each statement regarding a contract or other document is qualified in its entirety by reference to the actual contract or other document.

Table of Contents

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information that we file with it into this prospectus, which means that we can disclose important information to you by referring you to other documents. The information incorporated by reference is an important part of this prospectus. We incorporate by reference the following documents and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering (other than information "furnished" rather than "filed" and information that is modified or superseded by subsequently filed documents prior to the termination of this offering):

Our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 16, 2015;

Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 8, 2015;

Our Quarterly Report on Form 10-Q for the quarter ended June, 2015, filed with the SEC on August 6, 2015;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed with the SEC on November 5, 2015;
and

Our Current Reports on Form 8-K filed with the SEC on May 1, 2015, May 20, 2015 (except the information furnished under Item 7.01 thereof), July 22, 2015, August 20, 2015, August 31, 2015, October 29, 2015, November 20, 2015 and December 3, 2015.

We will provide without charge, upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus and a copy of any or all other contracts or documents which are referred to in this prospectus. Requests should be directed to:

MVB Financial Corp.
Attention: Corporate Secretary
301 Virginia Avenue
Fairmont, West Virginia 26554
Telephone number: (304) 367-8697.