FIRST MIDWEST BANCORP INC Form 424B3 August 23, 2018

Use these links to rapidly review the document <u>TABLE OF CONTENTS</u> <u>INDEX TO FINANCIAL STATEMENTS</u> Table of Contents

Table of Contents

Filed Pursuant to Rule 424(b)(3) Registration No. 333-226506

August 23, 2018

Dear Stockholders of Northern States Financial Corporation:

On June 6, 2018, First Midwest Bancorp, Inc. ("First Midwest") and Northern States Financial Corporation ("Northern States") entered into an Agreement and Plan of Merger ("merger agreement") that provides for the combination of the two companies. Under the merger agreement, Northern States will merge with and into First Midwest, with First Midwest being the surviving company (the "merger"). Following the merger at such time as First Midwest may determine, NorStates Bank, an Illinois state chartered bank and a wholly owned subsidiary of Northern States, will merge with and into First Midwest Bank, an Illinois state chartered bank and a wholly owned subsidiary of First Midwest, with First Midwest Bank being the surviving bank (the "bank merger"). Following the bank merger, First Midwest Bank will continue its corporate existence as a commercial bank organized under the laws of the State of Illinois.

Upon completion of the merger, each holder of shares of Northern States common stock, par value \$0.01 per share ("Northern States common stock"), will receive a fraction of a share (the "exchange ratio") of First Midwest common stock, par value \$0.01 per share ("First Midwest common stock"), in exchange for each share of Northern States common stock held immediately prior to the completion of the merger (the "merger consideration"), except in certain circumstances and subject to conditions described in the accompanying proxy statement/prospectus, calculated as follows:

if the per share volume weighted average price of First Midwest common stock on the Nasdaq Stock Market from 9:30 a.m. to 4:00 p.m., Eastern Time, for the 20 consecutive Nasdaq trading days ending on and including the fifth Nasdaq trading day immediately preceding (but not including) the closing date of the merger (the "Average First Midwest Stock Price") is greater than \$26.49, the exchange ratio shall equal the quotient, rounded down to the nearest fourth decimal place, of 0.9775 divided by the Average First Midwest Stock Price, which effectively caps the maximum per share value of the merger consideration you may receive at \$0.9775 per share of Northern States common stock;

if the Average First Midwest Stock Price is greater than or equal to \$22.86 and equal to or less than \$26.49, the exchange ratio shall equal 0.0369;

if the Average First Midwest Stock Price is equal to or greater than \$20.31 and less than \$22.86, the exchange ratio shall equal the quotient, rounded down to the nearest fourth decimal place, of 0.8435 divided by the Average First Midwest Stock Price; or

if the Average First Midwest Stock Price is less than \$20.31 (subject to Northern States' right to terminate the merger agreement and First Midwest's top-up right as described in the accompanying prospectus/proxy statement), the exchange

ratio shall equal 0.0415.

All unvested Northern States restricted stock awards outstanding immediately prior to the merger will become fully vested upon completion of the merger, and the holder thereof shall be entitled to receive the same merger consideration for the shares of Northern States common stock subject to such award as all other holders of Northern States common stock.

Based on the number of shares of Northern States common stock outstanding on August 20, 2018, we expect that the payment of the merger consideration will require First Midwest to issue approximately 3,359,801 shares of First Midwest common stock in connection with the merger. Based on the 20-day volume weighted average price of First Midwest common stock of \$26.0373 on June 6, 2018 (the last trading day before the announcement of the merger), each share of Northern States common stock exchanged for 0.0369 shares of First Midwest common stock would have a value of \$0.9607, with a proposed aggregate value of approximately \$88.7 million. Based on the 20-day volume weighted average price of First Midwest common stock of \$26.7862 on August 20, 2018, each share of Northern States common stock exchanged for 0.0364 shares of First Midwest common stock would have a value of \$0.975, with a proposed aggregate value of approximately \$90.0 million. In addition, based on the number of issued and outstanding shares of First Midwest common stock as of August 20, 2018, and based on the exchange ratio of 0.0364, holders of shares of Northern States common stock as of immediately prior to the closing of the merger will hold, in the aggregate, approximately 3.2% of the issued and outstanding shares of First Midwest common stock immediately following the effectiveness of the merger.

First Midwest common stock trades on the Nasdaq Stock Market under the symbol "FMBI." The following table shows the implied value of the merger consideration that would be received by Northern States stockholders in exchange for each share of Northern States common stock if the per share price of First Midwest common stock was \$26.0373, which was the per share volume weighted average price of First Midwest common stock on the Nasdaq Stock Market for the 20 trading days ending on and including June 6, 2018, the last trading day before the announcement of the merger,

Table of Contents

and if such price was \$26.7862, which was the per share volume weighted average price of First Midwest common stock on the Nasdaq Stock Market for the 20 trading days ending on and including August 20, 2018.

		ay Volume ted Average					
	Pric	Price of First			Total		
	M	Midwest			Consideration Per		
	C	Common Stock on Nasdaq		Share of Northern States Common Stock*			
	Stock						
June 6, 2018	\$	26.0373	0.0369	\$	0.9607		
August 20, 2018	\$	26.7862	0.0364	\$	0.9750		

*

Computed as the 20-day volume weighted average price of First Midwest common stock on the Nasdaq Stock Market ending on the date specified *multiplied by* the exchange ratio. The information presented does not reflect the actual value of the merger consideration that will be received by holders of Northern States common stock in the merger. The exchange ratio is subject to adjustment as described in the accompanying proxy statement/prospectus. The value of the merger consideration at the closing of the merger will be based on the price of First Midwest common stock on the date the merger is completed. The information presented above solely illustrates the implied value of the merger consideration based on the 20-day volume weighted average price of First Midwest common stock on the dates set forth above.

Northern States will hold a special meeting of its stockholders in connection with the merger. Holders of Northern States common stock will be asked to vote to approve the merger agreement and the transactions contemplated thereby, as described in the accompanying proxy statement/prospectus. Approval of the merger agreement and the transactions contemplated thereby requires the affirmative vote of the holders of at least a majority of the outstanding shares of Northern States common stock. All of the directors of Northern States, collectively holding an aggregate 6,875,016 shares of Northern States common stock (or approximately 7.4% of the outstanding shares) as of the Northern States record date, have signed voting agreements with First Midwest agreeing to vote for approval of the merger agreement and the transactions contemplated thereby.

The special meeting of holders of Northern States common stock will be held at the headquarters of Northern States Financial Corporation, located at 1601 North Lewis Avenue, Waukegan, Illinois 60085 on October 4, 2018, at 4:30 p.m. Central Time.

Northern States' board of directors unanimously recommends that holders of Northern States common stock vote "FOR" the approval of the merger agreement and the transactions contemplated thereby and "FOR" one or more adjournments of the Northern States special meeting, including adjournments to permit the further solicitation of proxies in favor of the foregoing proposals.

We cannot complete the merger without the approval of the merger agreement and the transactions contemplated thereby by holders of Northern States common stock. It is important that your shares be represented and voted regardless of the size of your holdings. Whether or not you plan to attend the special meeting of holders of Northern States common stock, we urge you to submit a proxy to have your shares voted in advance of the special meeting by using one of the methods described in the accompanying proxy statement/prospectus.

The accompanying proxy statement/prospectus provides important information regarding the special meeting and a detailed description of the merger agreement, the merger, certain related transactions and agreements and the matters to be presented at the special meeting. We encourage you to read the entire accompanying proxy statement/prospectus carefully (including any documents incorporated therein by reference). Please pay particular attention to "Risk Factors" beginning on page 19 for a discussion of the risks relating to the proposed merger.

We hope to see you at the special meeting and look forward to the successful completion of the merger.

Sincerely,

Scott M. Yelvington

President, Chief Executive Officer and Director

Northern States Financial Corporation

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved the securities to be issued in the merger or determined if this document is accurate or adequate. It is illegal to tell you otherwise. The securities to be issued in the merger are not savings or deposit accounts and are not insured by the Federal Deposit Insurance Corporation or any other governmental agency.

The date of the accompanying proxy statement/prospectus is August 23, 2018, and it is first being mailed or otherwise delivered to the stockholders of Northern States on or about August 30, 2018.

1601 North Lewis Avenue Waukegan, Illinois 60085

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

TO BE HELD ON OCTOBER 4, 2018

To the Stockholders of Northern States Financial Corporation:

NOTICE IS HEREBY GIVEN that a special meeting of the holders of common stock of Northern States Financial Corporation, a Delaware corporation ("Northern States"), will be held at the headquarters of Northern States Financial Corporation, located at 1601 North Lewis Avenue, Waukegan, Illinois 60085 on October 4, 2018, at 4:30 p.m. Central Time (the "Northern States special meeting"), for the purpose of considering and voting upon the following matters:

- 1. Approval by the holders of Northern States common stock of the Agreement and Plan of Merger, dated as of June 6, 2018, a copy of which is attached as *Appendix A* to the accompanying proxy statement/prospectus (the "merger agreement"), by and between First Midwest Bancorp, Inc. ("First Midwest") and Northern States, and the transactions contemplated thereby (the "merger proposal"), including the merger of Northern States with and into First Midwest, with First Midwest being the surviving company (the "merger");
- 2. Approval by the holders of Northern States common stock of one or more adjournments of the Northern States special meeting, if determined necessary and advisable, including adjournments to permit the further solicitation of proxies in favor of the merger proposal (the "Northern States adjournment proposal"); and
- 3. Transaction of such other business as may properly come before the Northern States special meeting and any adjournments or postponements thereof.

We have fixed the close of business on August 20, 2018, as the record date for determining those stockholders entitled to notice of and to vote at the Northern States special meeting and any adjournments of the Northern States special meeting. Only holders of record of Northern States common stock at the close of business on that date are entitled to notice of and to vote on the proposals at the Northern States special meeting and any adjournments of the Northern States special meeting. Approval of the merger proposal requires the affirmative vote of a majority of the outstanding shares of Northern States common stock. As a result, abstentions and broker non-votes will have the same effect as votes against approval of the merger proposal. Approval of the Northern States adjournment proposal requires the affirmative vote of a majority of the shares of Northern States common stock present in person or represented by proxy. Abstentions will have the same effect as votes against approval of the Northern States adjournment proposal, and broker non-votes will have no effect on the approval of the Northern States adjournment proposal assuming a quorum has been established. All of the directors of Northern States, collectively holding an aggregate 6,875,016 shares of Northern States common stock (or approximately 7.4% of the outstanding shares) as of the Northern States record date, have signed voting agreements with First Midwest agreeing to vote for approval of the merger agreement and the transactions contemplated thereby.

If you wish to attend the Northern States special meeting and your shares are held in the name of a bank, broker, trustee or other nominee, you must bring with you an account statement showing that you owned shares of Northern States common stock as of the record date and a "legal proxy" form from the bank, broker, trustee or other nominee to confirm your beneficial ownership of the shares.

Under Delaware law, Northern States stockholders who do not vote in favor of the merger proposal will have the right to seek appraisal of the fair value of their shares of Northern States common stock as determined by the Delaware Court of Chancery if the merger of Northern States with

Table of Contents

and into First Midwest is completed, but only if they submit a written demand for such an appraisal prior to the vote on the adoption of the merger proposal and comply with the other Delaware law procedures explained in the accompanying proxy statement/prospectus. Northern States stockholders who do not vote in favor of the merger proposal and who submit a written demand for such an appraisal prior to the vote on the adoption of the merger proposal and comply with the other Delaware law procedures will not receive the merger consideration.

Your vote is very important. Whether or not you plan to attend the Northern States special meeting in person, please complete, date, sign and return the enclosed proxy card in the enclosed envelope to ensure that your shares of Northern States common stock will be represented at the Northern States special meeting if you are unable to attend.

The board of directors of Northern States has unanimously approved the merger agreement and the merger, has determined that the merger agreement and the transactions contemplated thereby, including the merger, are advisable, fair to and in the best interests of Northern States and its stockholders, as well as Northern States' other respective constituencies, and unanimously recommends that holders of Northern States common stock vote "FOR" the merger proposal and vote "FOR" the Northern States adjournment proposal.

We encourage you to read the entire accompanying proxy statement/prospectus carefully (including any documents incorporated therein by reference). Please pay particular attention to "Risk Factors" beginning on page 19 for a discussion of the risks relating to the proposed merger.

By Order of the Board of Directors,

Kerry J. Biegay Vice President and Secretary

Waukegan, Illinois August 23, 2018

Table of Contents

ADDITIONAL INFORMATION

This proxy statement/prospectus incorporates by reference important business and financial information about First Midwest from documents filed with the Securities and Exchange Commission ("SEC") that are not included in or delivered with this proxy statement/prospectus. You can obtain any of the documents filed with or furnished to the SEC by First Midwest at no cost from the SEC's website maintained at http://www.sec.gov. You may also request copies of these documents, including documents incorporated by reference into this proxy statement/prospectus, at no cost by contacting First Midwest in writing at the address or by telephone as specified below:

First Midwest Bancorp, Inc.

Attention: Corporate Secretary 8750 West Bryn Mawr Avenue, Suite 1300 Chicago, Illinois 60631 (708) 831-7563

You will not be charged for any of these documents that you request. In order for you to receive timely delivery of the documents before the Northern States special meeting, you must request them no later than September 28, 2018.

See "Where You Can Find More Information" on page 92 of this proxy statement/prospectus.

Table of Contents

ABOUT THIS PROXY STATEMENT/PROSPECTUS

This proxy statement/prospectus, which forms part of a registration statement on Form S-4 filed with the SEC, constitutes a prospectus of First Midwest under Section 5 of the Securities Act of 1933, as amended (the "Securities Act"), with respect to the shares of First Midwest common stock to be issued to stockholders of Northern States as consideration in the merger of Northern States with and into First Midwest, as more fully described herein. This proxy statement/prospectus also constitutes a proxy statement for Northern States. In addition, it constitutes a notice of meeting with respect to the special meeting of Northern States stockholders.

You should rely only on the information contained in, or incorporated by reference into, this proxy statement/prospectus. No one has been authorized to provide you with information that is different from that contained in, or incorporated by reference into, this proxy statement/prospectus. This proxy statement/prospectus is dated August 23, 2018, and you should assume that the information in this proxy statement/prospectus is accurate only as of such date. You should assume that the information incorporated by reference into this proxy statement/prospectus is accurate only as of the date of such incorporated document. Neither the mailing of this proxy statement/prospectus to Northern States stockholders nor the issuance by First Midwest of shares of First Midwest common stock in connection with the merger will create any implication to the contrary.

This document does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction to or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction.

Table of Contents

TABLE OF CONTENTS

SUMMARY SELECTED CONSOLIDATED FINANCIAL DATA OF FIRST MIDWEST	1
· · · · · · · · · · · · · · · · · · ·	
SELECTED CONSOLIDATED FINANCIAL DATA OF NORTHERN STATES	
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	<u>17</u>
RISK FACTORS	<u>19</u>
NORTHERN STATES SPECIAL MEETING	<u>24</u>
THE MERGER	
Terms of the Merger	28 28
Background of the Merger	
First Midwest's Reasons for the Merger	<u>29</u>
Northern States' Reasons for the Merger and Recommendation of the Board of Northern States	<u>33</u>
Opinion of Northern States' Financial Advisor	<u>35</u>
Material Federal Income Tax Consequences of the Merger	<u>37</u>
Accounting Treatment	<u>43</u>
Interests of Certain Persons in the Merger	<u>47</u>
	<u>48</u>
THE MERGER AGREEMENT	<u>52</u>
Structure	<u>52</u>
Merger Consideration	<u>52</u>
Conversion of Shares; Exchange of Certificates; Fractional Shares	<u>53</u>
Effective Time	
Representations and Warranties	<u>54</u>
Conduct of Business Pending the Merger	<u>55</u>
Acquisition Proposals by Third Parties	<u>56</u>
Other Agreements	<u>58</u>
Conditions to Completion of the Merger	<u>60</u>
Termination of the Merger Agreement	<u>62</u>
Waiver and Amendment of the Merger Agreement	<u>64</u>
Regulatory Approvals Required for the Mergers	<u>66</u>

Dividends	<u>67</u>
	<u>68</u>
Stock Exchange Listing	<u>68</u>
Restrictions on Resales by Affiliates	<u>68</u>
Dissenters' Rights of Appraisal of Holders of Northern States Common Stock	<u>68</u>
i	

Table of Contents

Appendix A Appendix B Appendix C	Agreement and Plan of Merger between Northern States Financial Corporation and First Midwest Badated as of June 6, 2018 Opinion of Vining Sparks IBG, L.P. Delaware General Corporation Law, Section 262	ncorp, Inc.,	<u>A-1</u> <u>B-1</u> <u>C-1</u>
		<u>F-1</u>	
INDEX TO FINA	NCIAL STATEMENTS	<u>92</u>	
WHERE YOU CA	AN FIND MORE INFORMATION	<u>92</u>	
OTHER MATTER	<u>88</u>	<u>91</u>	
EXPERTS			
VALIDITY OF SI	<u>ECURITIES</u>	9 <u>1</u>	
STOCKHOLDER PROPOSALS		<u>91</u>	
SECURITY OWN	IERSHIP OF CERTAIN NORTHERN STATES BENEFICIAL OWNERS AND MANAGEMENT	<u>90</u>	
COMPARISON C	OF STOCKHOLDER RIGHTS	<u>82</u>	
	OF FIRST MIDWEST CAPITAL STOCK	<u>80</u>	
		<u>78</u>	
	ABOUT THE COMPANIES	<u>75</u>	
	OF COMMON STOCK AND DIVIDENDS	<u>74</u>	
<u>Voting Agreements</u> <u>Confidentiality, Non-Solicitation and Non-Competition Agreements</u>		<u>73</u>	

Table of Contents

SUMMARY

This summary highlights selected information from this proxy statement/prospectus and may not contain all the information that is important to you. We urge you to read carefully this entire document, and the documents referenced herein, for a more complete understanding of the merger between First Midwest and Northern States. In addition, we incorporate by reference into this document important business and financial information about First Midwest. You may obtain the information incorporated by reference in this document without charge by following the instructions in the section entitled "Where You Can Find More Information." Each item in this summary includes a page reference directing you to a more complete description of that item.

Unless the context otherwise requires, references in this proxy statement/prospectus to "First Midwest" refer to First Midwest Bancorp, Inc., a Delaware corporation; references to "First Midwest Bank" refer to First Midwest Bank, an Illinois state chartered bank and wholly owned subsidiary of First Midwest; references to "Northern States" refer to Northern States Financial Corporation, a Delaware corporation; references to "NorStates Bank" refer to NorStates Bank, an Illinois state chartered bank and wholly owned subsidiary of Northern States; and references to "we," "our" or "us" refer to First Midwest and Northern States.

We Propose a Merger of First Midwest and Northern States (Page 28)

We propose that Northern States will merge with and into First Midwest, with First Midwest being the surviving company (the "merger"). As a result of the merger, the separate existence of Northern States will terminate. Following the merger at such time as First Midwest may determine, Northern States' wholly owned bank subsidiary, NorStates Bank, will merge with and into First Midwest's wholly owned bank subsidiary, First Midwest Bank, with First Midwest Bank being the surviving bank (the "bank merger"). Following the bank merger, First Midwest Bank will continue its corporate existence as a commercial bank organized under the laws of the State of Illinois. We expect to complete the merger and the bank merger in the fourth quarter of 2018, although delays may occur.

Special Meeting of Northern States (Page 24)

Northern States plans to hold its special meeting of stockholders at the headquarters of Northern States Financial Corporation, located at 1601 North Lewis Avenue, Waukegan, Illinois 60085, on October 4, 2018 at 4:30 p.m. Central Time (the "Northern States special meeting"). At the Northern States special meeting, holders of Northern States common stock, par value \$0.01 per share ("Northern States common stock"), will be asked to approve the merger agreement and the transactions contemplated thereby, including the merger (the "merger proposal").

You can vote at the Northern States special meeting to approve the merger proposal if you owned Northern States common stock at the close of business on August 20, 2018 (the "Northern States record date"). As of that date, there were 92,302,244 shares of Northern States common stock outstanding and entitled to vote. A holder of Northern States common stock can cast one vote for each share of Northern States common stock owned on that date.

Northern States' Board Unanimously Recommends That Holders of Northern States Common Stock Vote "FOR" the Merger Proposal (Page 35)

Northern States' board of directors (i) believes that the Agreement and Plan of Merger, dated as of June 6, 2018, between Northern States and First Midwest (the "merger agreement") and the transactions contemplated thereby are advisable, fair to and in the best interests of Northern States and its stockholders, as well as Northern States' other respective constituencies, (ii) has unanimously approved and adopted the merger agreement and the transactions contemplated thereby, and

1

Table of Contents

(iii) unanimously recommends that holders of Northern States common stock vote "FOR" the merger proposal.

All of the directors of Northern States, collectively holding an aggregate 6,875,016 shares of Northern States common stock (or approximately 7.4% of the outstanding shares) as of the Northern States record date, have signed voting agreements with First Midwest agreeing to vote for approval of the merger agreement and the transactions contemplated thereby.

Northern States Stockholders Will Receive Shares of First Midwest Common Stock in the Merger (Page 28)

Upon completion of the merger, each holder of Northern States common stock will receive a fraction of a share (the "exchange ratio") of First Midwest common stock, par value \$0.01 per share ("First Midwest common stock"), in exchange for each share of Northern States common stock held immediately prior to the completion of the merger (the "merger consideration"), except in certain circumstances and subject to adjustment as described in this proxy statement/prospectus, calculated as follows:

if the per share volume weighted average price of First Midwest common stock on the Nasdaq Stock Market from 9:30 a.m. to 4:00 p.m., Eastern Time, for the 20 consecutive Nasdaq trading days ending on and including the fifth Nasdaq trading day immediately preceding (but not including) the closing date of the merger (the "Average First Midwest Stock Price", and such date, the "Determination Date") is greater than \$26.49, the exchange ratio shall equal the quotient, rounded down to the nearest fourth decimal place, of 0.9775 divided by the Average First Midwest Stock Price, which effectively caps the maximum per share value of the merger consideration you may receive at \$0.9775 per share of Northern States common stock:

if the Average First Midwest Stock Price is greater than or equal to \$22.86 and equal to or less than \$26.49, the exchange ratio shall equal 0.0369;

if the Average First Midwest Stock Price is equal to or greater than \$20.31 and less than \$22.86, the exchange ratio shall equal the quotient, rounded down to the nearest fourth decimal place, of 0.8435 divided by the Average First Midwest Stock Price; or

if the Average First Midwest Stock Price is less than \$20.31 (subject to Northern States' right to terminate the merger agreement and First Midwest's top-up right as described below under "The Merger Agreement Termination of the Merger Agreement"), the exchange ratio shall equal 0.0415.

The merger consideration may be subject to adjustment if certain environmental conditions exist with respect to Northern States' real property acquired after June 6, 2018 (if any) and/or title defects exist with respect to any of Northern States' real property and the total cost to remediate and/or cure such conditions or defects (the "real property adjustment amount") is greater than \$100,000. In that case, the exchange ratio will be reduced by an amount equal to the result of: (i) the real property adjustment amount, *divided by* (ii) the number of outstanding shares of Northern States common stock, *divided by* (iii) the per share volume weighted average price of First Midwest common stock on the Nasdaq Stock Market from 9:30 a.m. to 4:00 p.m., Eastern Time, on the trading day immediately preceding the closing date of the merger.

Instead of fractional shares of First Midwest common stock, Northern States stockholders will receive cash for any fractional shares based on the per share volume weighted average price of the First Midwest common stock on the Nasdaq Stock Market from 9:30 a.m. to 4:00 p.m., Eastern Time, on the trading day immediately preceding the closing date of the merger.

Table of Contents

The following table shows the implied value of the merger consideration that would be received by Northern States stockholders in exchange for each share of Northern States common stock if the per share price of a share of First Midwest common stock was \$26.0373, which was the per share volume weighted average price of First Midwest common stock on the Nasdaq Stock Market for the 20 trading days ending on and including June 6, 2018, the last trading day before the announcement of the merger, and if such price was \$26.7862, which was the per share volume weighted average price of First Midwest common stock on the Nasdaq Stock Market for the 20 trading days ending on and including August 20, 2018.

		20-Day Volume					
	Weighted			Total			
		Average Price of First			Consideration Per Share		
		Midwest			of Northern		
	_	Common		States			
	~	Stock on Exc Nasdaq F		Common Stock*			
June 6, 2018	\$	26.0373	0.0369	\$	0.9607		
August 20, 2018	\$	26.7862	0.0364	\$	0.9750		

*

Computed as the 20-day volume weighted average price of First Midwest common stock on the Nasdaq Stock Market ending on the date specified *multiplied by* the exchange ratio. The information presented does not reflect the actual value of the merger consideration that will be received by holders of Northern States common stock in the merger. The exchange ratio is subject to adjustment as described in this proxy statement/prospectus. The value of the merger consideration at the closing of the merger will be based on the price of First Midwest common stock on the date the merger is completed. The information presented above solely illustrates the implied value of the merger consideration based on the 20-day volume weighed average price of First Midwest common stock on the dates set forth above.

All unvested Northern States restricted stock awards outstanding immediately prior to the merger will become fully vested upon completion of the merger and the holder thereof shall be entitled to receive the same merger consideration for the shares of Northern States common stock subject to such award as all other holders of Northern States common stock.

Tax Consequences of the Merger (Page 43)

Subject to certain circumstances described below, and based on certain representations, covenants and assumptions, all of which must continue to be true and accurate in all material respects as of the effective time of the merger, in the opinion of Chapman and Cutler LLP ("Chapman and Cutler") and Barack Ferrazzano Kirschbaum & Nagelberg LLP ("Barack Ferrazzano"), for United States federal income tax purposes, the merger will be treated as a "reorganization" within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the "Code").

Provided that the merger qualifies as a reorganization for United States federal income tax purposes, Northern States stockholders generally will not recognize any gain or loss upon receipt of First Midwest common stock in exchange for Northern States common stock in the merger (except for any gain or loss that may result from the receipt of cash in lieu of fractional shares of First Midwest common stock that a Northern States stockholder would otherwise be entitled to receive).

For a complete description of the material United States federal income tax consequences of the transaction, see "The Merger Material Federal Income Tax Consequences of the Merger." You should consult your own tax advisor for a full understanding of the tax consequences to you of the merger.

Table of Contents

Prohibition on Northern States Dividends; First Midwest's Dividend Policy Will Continue After the Merger (Pages 68 and 75)

Northern States is generally prohibited from paying cash dividends to holders of its common stock prior to completion of the merger.

First Midwest expects to continue its common stock dividend practice after the merger, but this practice is subject to the determination and discretion of First Midwest's board of directors and may change at any time. This determination depends on a variety of factors, including cash requirements, financial condition and earnings, legal and regulatory considerations and other factors. In each of the first three quarters of 2018, First Midwest declared a quarterly cash dividend of \$0.11 per share of First Midwest common stock.

Northern States has not declared or paid a dividend in 2018.

The Merger Will Be Accounted for as a Purchase (Page 47)

The merger will be treated as a purchase by First Midwest of Northern States under generally accepted accounting principles ("GAAP").

First Midwest's Reasons for the Merger (Page 33)

For a discussion of the factors considered by First Midwest's board of directors in reaching its decision to approve the merger agreement and the transactions contemplated thereby, including the merger, see "The Merger First Midwest's Reasons for the Merger."

Northern States' Reasons for the Merger (Page 35)

For a discussion of the factors considered by Northern States' board of directors in reaching its decision to approve the merger agreement and the transactions contemplated thereby, including the merger, see "The Merger Northern States' Reasons for the Merger and Recommendation of the Board of Northern States."

Opinion of Northern States' Financial Advisor (Page 37)

On June 5, 2018, Vining Sparks IBG, L.P. ("Vining Sparks") rendered its oral and written opinion to the board of directors of Northern States that, as of such date and based upon and subject to the various factors, assumptions and limitations set forth in such opinion, the exchange ratio in the proposed merger was fair, from a financial point of view, to the holders of Northern States common stock.

The full text of the written opinion of Vining Sparks, dated June 5, 2018, which sets forth, among other things, the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken, is attached as *Appendix B* to this proxy statement/prospectus and is incorporated herein by reference. The summary of the opinion of Vining Sparks set forth in this proxy statement/prospectus is qualified in its entirety by reference to the full text of such opinion. Northern States stockholders are urged to read the opinion in its entirety. Vining Sparks' written opinion was addressed to the board of directors of Northern States (in its capacity as such) in connection with and for the purposes of its evaluation of the proposed merger and was directed only to the exchange ratio in the proposed merger and did not address any other aspect of the merger. Vining Sparks expressed no opinion as to the fairness of the consideration to the holders of any other class of securities, creditors or other constituencies of Northern States or as to the underlying decision by Northern States to engage in the merger. The issuance of Vining Sparks' opinion was approved by a fairness opinion committee of Vining Sparks. The opinion does not constitute a recommendation to

Table of Contents

any Northern States stockholders as to how such stockholder should vote with respect to the proposed merger or any other matter.

Certain Directors and Executive Officers May Have Interests in the Merger That Differ from Your Interests (Page 48)

Certain directors and executive officers of Northern States and/or NorStates Bank have interests in the merger other than their interests as stockholders, including:

To the extent a director or executive officer holds unvested restricted stock awards, upon completion of the merger, such awards will become fully earned and vested per the terms of the Northern States 2015 Equity Incentive Plan (the "Northern States Stock Plan") and the award agreements issued thereunder, and the shares of Northern States common stock subject to such awards will be converted to First Midwest common stock as discussed in the "The Merger Merger Consideration," subject to any required withholding tax. As of the date of the merger agreement, directors and executive officers of Northern States and NorStates Bank, as a group, held 2,100,000 unvested restricted stock awards.

NorStates Bank has entered into employment agreements with each of Scott Yelvington, its President and Chief Executive Officer, Patricia Christian, its Chief Operating Officer, and Matthew Tilton, its Chief Lending Officer. The employment agreements provide for certain severance benefits in the event of a qualifying termination of employment in connection with a change in control of NorStates Bank or Northern States. In such instance, Mr. Yelvington and Ms. Christian would be entitled to receive a lump sum payment equal to two times his or her base salary plus two times the average of their respective last two annual and profit sharing bonuses, and Mr. Tilton would be entitled to receive a lump sum payment equal to one and one-half times his base salary plus one and one-half times the average of his last two annual and profit sharing bonuses, equal to approximately \$540,192, \$468,846 and \$336,346, respectively, if such terminations were to occur in 2018. First Midwest and Northern States have agreed that these amounts will be paid in connection with closing. In addition, each executive would be entitled to health insurance continuation coverage for 36 months after termination and would be subject to non-competition restrictions for 12 months following termination of employment for any reason and non-solicitation restrictions for 12 months following termination of employment for just cause or without good reason. Additionally, as a result of the exchange of their Northern States unvested restricted stock holdings held as of the Northern States record date that vest on the completion of the merger, based on the 20-day volume weighted average price per share of First Midwest common stock of \$26.7862 as of August 20, 2018 and assuming an exchange ratio of 0.0364, it is estimated that the executive officers of Northern States, Mr. Yelvington, Ms. Christian, Mr. Tilton and Mr. Randall Sara, its Chief Financial Officer, would respectively receive First Midwest common stock equal to a net cash value of approximately \$429,008, \$390,007, \$351,006 and \$292,505.

First Midwest has entered into an agreement with Mr. Sara whereby it is expected that his employment will terminate 20 business days after the date following the bank merger on which NorStates Bank and First Midwest Bank complete their operating systems conversion, and he will be eligible to receive approximately \$10,800 in severance payments under the NorStates Bank Transition Period Severance Plan. In addition, Mr. Sara will be eligible to receive a cash retention bonus equal to \$17,500, subject to his continued employment through such time.

In connection with the execution of the merger agreement, one Northern States executive officer, Mr. Tilton, entered into an offer letter with First Midwest setting forth the terms and conditions of employment with First Midwest Bank following the merger, in addition to a new confidentiality and restrictive covenants agreement. The terms and conditions of the offer letter

Table of Contents

include a base salary of \$190,000 and participation in First Midwest's short-term and long-term incentive programs. In recognition of his agreement to enter into a new confidentiality and restrictive covenants agreement, and as a retention incentive, the offer letter with First Midwest provides for a cash payment to Mr. Tilton by First Midwest of \$90,000, payable \$50,000 after the closing of the merger and \$40,000 on the first anniversary thereof, subject to partial repayment on certain terminations of employment. First Midwest may determine to enter into new offer letters or other new employment arrangements with executive officers of Northern States that would be effective upon completion of the merger.

Northern States retained FIG Partners LLC ("FIG") to serve as one of its financial advisors in connection with the merger. Pursuant to the engagement letter entered into between Northern States and FIG, as compensation for FIG's financial advisory services provided to Northern States, Northern States agreed to pay FIG a success fee equal to one and two-tenths percent (1.2%) of the purchase consideration, as defined in the engagement letter. Gregory Gersack, one of the directors of Northern States, is a managing principal of FIG.

Upon the termination of a certain deferred compensation arrangement under the terms of the merger agreement, one of Northern States' directors will receive a lump sum payment of approximately \$262,000.

NorStates Bank maintains pre-retirement split dollar life insurance arrangements with respect to several of its employees, including Ms. Christian and Mr. Tilton. Pursuant to these arrangements, if an employee dies prior to his or her retirement age of 65 years, the employee's beneficiary will receive a stated death benefit. If either Ms. Christian or Mr. Tilton were to die prior to age 65, her or his respective beneficiary would receive a death benefit equal to \$200,000. These death benefits are fully funded by bank-owned life insurance policies and, to the extent a policy has greater value than the death benefit at the time of an employee's death, such excess will revert to the benefit of NorStates Bank or its successor.

Pursuant to the terms of the merger agreement, directors and officers of Northern States will be entitled to certain ongoing indemnification and coverage under directors' and officers' liability insurance policies following the merger.

Northern States' board of directors was aware of these additional interests and considered them when they adopted the merger agreement and approved the merger.

Holders of Northern States Common Stock Have Dissenters' Rights of Appraisal (Page 68)

If you are a stockholder of Northern States, you may elect to dissent from the merger and exercise appraisal rights by following the procedures set forth in Section 262 of the General Corporation Law of the State of Delaware (the "DGCL"). For more information regarding your right to dissent from the merger and exercise appraisal rights, please see "The Merger Agreement Dissenters' Rights of Appraisal of Holders of Northern States Common Stock" on page 68. We have also attached a copy of the relevant provisions of Section 262 of the DGCL as *Appendix C* to this proxy statement/prospectus.

We Have Agreed When and How Northern States Can Consider Third-Party Acquisition Proposals (Page 58)

We have agreed that Northern States will not, and will cause its subsidiaries and its subsidiaries' representatives, agents, advisors and affiliates not to, solicit or encourage proposals from other parties regarding acquiring Northern States or its businesses. In addition, we have agreed that Northern States will not engage in negotiations with or provide confidential information to a third party regarding acquiring Northern States or its businesses. However, if Northern States receives an unsolicited acquisition proposal from a third party, Northern States can participate in negotiations with and

Table of Contents

provide confidential information to the third party if, among other steps, Northern States' board of directors concludes in good faith that the proposal is superior to First Midwest's merger proposal. Northern States' receipt of a superior proposal or participation in such negotiations does not give Northern States the right to terminate the merger agreement.

Approval of the Merger Agreement and the Transactions Contemplated Thereby Requires the Affirmative Vote of the Holders of a Majority of the Outstanding Shares of Northern States Common Stock (Page 24)

In order to approve the merger agreement and the transactions contemplated thereby, including the merger, the holders of a majority of the outstanding shares of Northern States common stock as of the record date of August 20, 2018, must vote in favor of that matter. As of that date, Northern States' directors and executive officers and their affiliates held approximately 9.4% of the outstanding shares of Northern States common stock entitled to vote at the special meeting. All of the directors of Northern States and NorStates Bank, collectively holding an aggregate 6,875,016 shares of Northern States common stock (or approximately 7.4% of the outstanding shares) as of the record date, have signed voting agreements with First Midwest agreeing to vote for approval of the merger agreement and the transactions contemplated thereby, including the merger.

Under the terms of the Northern States Stock Plan and award agreements thereunder, recipients of restricted stock awards are entitled to vote on behalf of underlying shares, even while subject to vesting requirements, from the date of grant until such awards are forfeited. Holders of Northern States restricted stock will vote in the same manner as holders of Northern States common stock. As of the record date, participants in the Northern States Stock Plan held approximately 3.6% of the shares entitled to vote at the special meeting.

For a list of the number of shares of Northern States common stock held by (i) each director and executive officer of Northern States, and (ii) all directors and executive officers of Northern States as a group, see "Security Ownership of Certain Northern States Beneficial Owners and Management."

Certain Stockholders of Northern States Have Agreed to Vote Their Shares "FOR" the Merger (Page 73 and *Annex 1-B* to *Appendix A*)

As an inducement to and condition of First Midwest's willingness to enter into the merger agreement, all of the directors of Northern States and NorStates Bank, collectively holding an aggregate 6,875,016 shares of Northern States common stock (or approximately 7.4% of the outstanding shares) as of the record date, entered into voting agreements, pursuant to which, among other things, they agreed to vote all of their shares of Northern States common stock in favor of approval of the merger agreement and the transactions contemplated thereby and other matters required to be approved or adopted to effect the merger and any other transactions contemplated by the merger agreement.

We Must Meet Several Conditions to Complete the Merger (Page 62)

Our obligations to complete the merger depend on a number of conditions being met. These include:

the approval of the merger agreement and the transactions contemplated thereby by holders of Northern States common stock:

the receipt of the remaining required approvals of federal and state regulatory authorities;

the listing on the Nasdaq Stock Market of the shares of First Midwest common stock to be issued in the merger;

7

Table of Contents

the effectiveness of the registration statement on Form S-4, of which this proxy statement/prospectus is a part, for the registration of the shares of First Midwest common stock to be issued in the merger;

the absence of any government action or other legal restraint or prohibition that would prohibit the merger or make it illegal;

as to each of us, the representations and warranties of the other party to the merger agreement being true and correct in all material respects (except for representations and warranties qualified by the words "material" or "Material Adverse Effect," and certain representations and warranties regarding Northern States' capitalization, which are required to be true and correct in all respects) as of the date of the merger agreement and as of the closing date of the merger, and the other party to the merger agreement having performed in all material respects all of its obligations and complied in all material respects with all of its agreements and covenants under the merger agreement;

the receipt of legal opinions that, for United States federal income tax purposes, the merger will be treated as a tax-free reorganization under federal tax laws. These opinions will be based on customary assumptions and on factual representations made by First Midwest and Northern States and will be subject to various limitations;

with regard to First Midwest's obligation (but not Northern States'), the receipt of a legal opinion from Northern States' outside counsel, Barack Ferrazzano, as to certain corporate matters, including Northern States' due incorporation and legal standing, the legal status of Northern States' capital stock and the due authorization and execution of the merger agreement;

with regard to First Midwest's obligation (but not Northern States'), the number of dissenting shares of Northern States common stock must not exceed 5% of the outstanding shares of Northern States common stock;

with regard to First Midwest's obligation (but not Northern States'), the receipt by Northern States of certain required third-party approvals;

with regard to First Midwest's obligation (but not Northern States'), Northern States' closing tangible common equity, as defined in the merger agreement, must be greater than or equal to \$53,100,000 (as of July 31, 2018, Northern States' tangible common equity was approximately \$54,342,700);

with regard to First Midwest's obligation (but not Northern States'), the ten-day average of Northern States' consolidated deposits must be greater than or equal to \$353,300,000 for the ten-day period ending on the day immediately prior to the closing date;

with regard to First Midwest's obligation (but not Northern States'), Northern States' closing consolidated total loans (excluding loans held for sale) must be greater than or equal to \$285,700,000;

with regard to First Midwest's obligation (but not Northern States'), the environmental and title review process of Northern States' real property set forth in the merger agreement shall be completed in accordance with the provisions of the merger agreement;

with regard to First Midwest's obligation (but not Northern States'), the receipt by First Midwest of the resignations, effective as of the effective time of the merger, of each director and officer of Northern States and each director and executive officer of NorStates Bank;

with regard to First Midwest's obligation (but not Northern States'), the receipt by First Midwest of a certificate by Northern States stating that it and NorStates Bank are not and have not been United States real property holding corporations;

Table of Contents

with regard to First Midwest's obligation (but not Northern States'), the receipt by First Midwest of a certificate by Northern States stating a material adverse effect, as defined in the merger agreement, has not occurred to Northern States;

with regard to First Midwest's obligation (but not Northern States'), the receipt by First Midwest of a certificate from American Stock & Transfer Company, LLC certifying the number of shares of Northern States common stock outstanding as of the closing date;

with regard to First Midwest's obligation (but not Northern States'), no action, suit, claim or proceeding shall be pending against or affecting Northern States or First Midwest that is seeking to prohibit or make illegal the consummation of the merger; and

with regard to First Midwest's obligation (but not Northern States'), an agreement to terminate certain agreements regarding the referral of certain Northern States customers to a third party and the use of certain Northern States office space by such third party shall be in full force and effect and NorStates Bank shall be in compliance with such agreement.

Where the law permits, either of First Midwest or Northern States could choose to waive a condition to its obligation to complete the merger even when that condition has not been satisfied. We cannot be certain when, or if, the conditions to the merger will be satisfied or waived, or that the merger will be completed. Although the merger agreement allows both parties to waive the tax opinion condition, neither party currently anticipates doing so.

We Must Obtain Regulatory Approvals to Complete the Merger (Page 67)

The merger and the related transactions require approval from the Board of Governors of the Federal Reserve System (the "Federal Reserve"), and our application has been approved by the Federal Reserve. The bank merger must also be approved by the Illinois Department of Financial and Professional Regulation (the "IDFPR"), and an application for approval was filed on July 3, 2018.