

Report on Examination  
of  
**FACTORY MUTUAL INSURANCE COMPANY  
AFFILIATED FM INSURANCE COMPANY  
APPALACHIAN INSURANCE COMPANY**

Johnston, Rhode Island

as of

December 31, 2022



State of Rhode Island  
Department of Business Regulation  
Insurance Division



State of Rhode Island  
DEPARTMENT OF BUSINESS REGULATION  
1511 Pontiac Avenue, Bldg. 69-2  
Cranston, Rhode Island 02920

**Insurance Division**

**ADOPTION ORDER**

The attached Report of Examination as of December 31, 2022, of the condition and affairs of

FACTORY MUTUAL INSURANCE COMPANY  
AFFILIATED FM INSURANCE COMPANY  
APPALACHIAN INSURANCE COMPANY

was recently completed by duly qualified examiners, pursuant to the provisions of the Rhode Island General Laws.

Due consideration has been given to the comments of the examiners regarding the operation of the Companies and their financial condition, as reflected in the report.

It is therefore ORDERED that said Report be, and it is hereby, adopted and filed and made an official record of this Department as of this date.

Department of Business Regulation

Elizabeth Kelleher Dwyer  
Superintendent of Insurance

Dated: November 17, 2023

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September 29, 2023

Ms. Elizabeth Kelleher Dwyer  
Superintendent of Insurance  
State of Rhode Island  
Department of Business Regulation  
1511 Pontiac Avenue, Bldg. 69-2  
Cranston, Rhode Island 02920

Dear Superintendent Dwyer:

In accordance with your instructions and pursuant to Chapters 13.1 and 35 of Title 27 of the General Laws of the State of Rhode Island, an examination has been made as of December 31, 2022, of the financial condition and affairs of

**FACTORY MUTUAL INSURANCE COMPANY  
AFFILIATED FM INSURANCE COMPANY  
APPALACHIAN INSURANCE COMPANY**

located at 270 Central Avenue, Johnston, Rhode Island. The report of such examination is herewith submitted.

The above companies are referred to within this report collectively as the “Companies” or the “FM Global Group.” The Companies were previously examined as of December 31, 2017, and both the current and prior examinations were conducted by the Insurance Division of the State of Rhode Island (“Insurance Division”).

## SCOPE OF EXAMINATION

The last examination of the Companies covered the five-year period from January 1, 2013 through December 31, 2017. The current examination covered the five-year period from January 1, 2018 through December 31, 2022 and was performed in compliance with the above mentioned sections of the General Laws of the State of Rhode Island, as amended. We conducted our single-state examination in accordance with the NAIC *Financial Condition Examiners Handbook* (“Handbook”) risk-focused examination process.

The Handbook requires that we plan and perform the examination to evaluate the financial condition, assess corporate governance, identify current and prospective risks of the Companies and evaluate system controls and procedures used to mitigate those risks. An examination also includes identifying and evaluating significant risks that could cause an insurer’s surplus to be materially misstated both currently and prospectively.

All accounts and activities of the Companies were considered in accordance with the risk-focused examination process. This may include assessing significant estimates made by management and evaluating management’s compliance with Statutory Accounting Principles. The examination does not attest to the fair presentation of the financial statements included herein. If, during the course of the examination an adjustment is identified, the impact of such adjustment will be documented separately following the Companies’ financial statements.

This examination report includes significant findings of fact, and general information about the Companies and their financial condition. There may be other items identified during the

examination that, due to their nature (e.g., subjective conclusions, proprietary information, etc.) are not included within the examination report but separately communicated to other regulators and/or the Companies.

### **SUMMARY OF SIGNIFICANT FINDINGS**

There were no material adverse or significant non-compliance findings noted during the examination conducted as of December 31, 2022.

### **COMPANY HISTORY**

#### *Factory Mutual Insurance Company*

Factory Mutual Insurance Company (“FMIC”) derives its corporate existence and powers from special Acts of the General Assembly of the State of Rhode Island, which are collectively referred to as its charter.

At its January 1968 session, the General Assembly passed an Act which had the effect of amending the charters of three Rhode Island insurance companies: Manufacturers Mutual Fire Insurance Company incorporated in 1835, Firemen’s Mutual Insurance Company incorporated in 1854, and Blackstone Mutual Insurance Company incorporated in 1868. All three companies were members of a group of mutual insurance companies generally known as the Factory Mutual System. The charter amendments provided for consolidation of the three companies into a single corporation with the name “MFB Mutual Insurance Company,” which retained the incorporation date 1835, being that of the oldest consolidating company. Actual consolidation of the operations, books and records of the three companies took place on July 1, 1968. Subsequently, the General Assembly

amended the consolidated Company's charter to change its name to "Allendale Mutual Insurance Company" effective July 1, 1971, and to change its corporate location to Johnston, Rhode Island.

Over the past century, and until mid-1999, the Factory Mutual System had consolidated from an original forty companies down to three members, Allendale Mutual Insurance Company ("Allendale Mutual"), Arkwright Mutual Insurance Company ("Arkwright Mutual") and Protection Mutual Insurance Company ("Protection Mutual"). Effective July 1, 1999, these three remaining companies merged with the surviving entity, Allendale Mutual, changing its name to FMIC. The Group currently operates under the name "FM Global." With the merger, FMIC became the sole surviving Factory Mutual System member.

As a mutual company, FMIC is owned by its policyholders with the majority of those policyholders being Fortune 1000 companies with significant amounts of industrial, commercial, or institutional property to protect. Management of the Company is responsible to the policyholders through its Board of Directors, which is comprised of executive officers of some of the Company's largest policyholders.

#### *Affiliated FM Insurance Company*

Affiliated FM Insurance Company ("AFM") was chartered by an Act of the General Assembly of the State of Rhode Island at its January 1949 session. The Charter was amended in 1969, 1975, 1980, 1988, and 1994.

Prior to July 1, 1971, AFM was owned by the Associated Factory Mutual Insurance Companies, which consisted of Allendale Mutual (then named MFB Mutual Insurance Company), Arkwright-Boston Manufacturers Mutual Insurance Company (“Arkwright-Boston”), Philadelphia Manufacturers Mutual Insurance Company (“Philadelphia Manufacturers”) (which has since merged with Arkwright-Boston) and Protection Mutual. On July 1, 1971, Allendale Associates, Inc. a wholly owned subsidiary of Allendale Mutual acquired the capital stock of AFM that was owned by Allendale Mutual and Arkwright-Boston. Further acquisitions in 1974 and 1977 from Protection Mutual and Philadelphia Manufacturers resulted in Allendale Associates, Inc. attaining 100% ownership of the 30,000 shares of AFM’s outstanding common stock. Finally, on July 1, 1999, Allendale Associates, Inc. changed its name to FMIC Holdings Inc. The name change was the result of the three remaining Factory Mutual companies (Allendale Mutual, Arkwright Mutual, and Protection Mutual) merging into Allendale Mutual, with Allendale Mutual subsequently changing its name to Factory Mutual Insurance Company.

In 1975 AFM issued \$100 par value 7% cumulative preferred stock in accordance with a charter amendment completed that same year. In 1978 and 1979 AFM issued additional preferred stock, and in 1982 it accomplished a reorganization whereby one-half of the total 7% cumulative preferred stock outstanding at that time, amounting to \$7,250,000, was exchanged by the holders thereof for surplus notes bearing interest at 7%. AFM’s preferred stock has always been issued at par. The holders of preferred stock have no voting rights and AFM may, at its discretion, redeem any such shares issued and outstanding.



On October 11, 1995, Allendale Associates, Inc. purchased an additional 50,000 shares of AFM's \$50 par value common stock. This capital stock purchase received the necessary approval from the Rhode Island Department of Business Regulation, and AFM filed the necessary amendments to its Articles of Incorporation.

To enable AFM to increase its capacity to write additional business, and to improve its surplus position, from time to time it has issued interest-bearing surplus notes. Originally issued for a one-year term, the notes contained a provision that they would be automatically renewed from year to year unless AFM redeemed them. The redemption was only to take place once prior written approval of the Rhode Island Department of Business Regulation was obtained. As of December 31, 2022, all surplus notes had been redeemed.

At December 31, 2022, FMIC Holdings, Inc. owned all 80,000 shares of AFM's \$50 par value common stock for a total of \$4,000,000; and it owned 47,500 shares, or 65.5%, of the \$100 par value 7% cumulative preferred stock for a total of \$4,750,000. Appalachian Insurance Company ("Appalachian") owns 25,000 shares or 34.5% of AFM's \$100 par value 7% cumulative preferred stock for a total of \$2,500,000.

#### *Appalachian Insurance Company*

Appalachian Insurance Company ("Appalachian") was chartered under the name "Appalachian Insurance Company of Providence," by an Act of the Rhode Island General Assembly at its April 1941 session, with the Charter providing for an original paid-up capital of \$25,000, and a maximum authorized capital of \$1,000,000 "divided into shares of \$5 each." The Charter also

required an initial paid-in surplus equal in amount to the initial paid-up capital.

The Charter was amended by acts of the General Assembly in 1964 and 1975. The 1964 amendment authorized the Board of Directors to increase the capital stock of Appalachian to an amount not exceeding \$5,000,000, and the 1975 amendment deleted the words “of Providence” from the corporate name.

Ownership of Appalachian’s capital stock rested with individuals from its inception until 1957. In that year the Freeway Realty Corporation, of Providence, Rhode Island, a wholly owned subsidiary of the Firemen’s Mutual Insurance Company, also of Providence, Rhode Island, acquired control of Appalachian through the purchase of a majority of its outstanding stock. Through additional purchases made in 1958, Freeway Realty acquired the remaining capital stock of Appalachian.

In 1968 the three Rhode Island-based Factory Mutual Insurance companies, Blackstone Mutual Insurance Company, Firemen’s Mutual Insurance Company and Manufacturers Mutual Fire Insurance Company, consolidated to form MFB Mutual Insurance Company (“MFB”). Ownership of the Freeway Realty Corporation then passed to the MFB. In 1971 MFB changed its name to Allendale Mutual, and Freeway Realty Corporation changed its name to Allendale Associates, Inc. Finally, on July 1, 1999, Allendale Associates, Inc. changed its name to FMIC Holdings Inc. The name change was the result of the merger of the three remaining factory mutual companies (Allendale Mutual, Arkwright Mutual, and Protection Mutual, with Allendale Mutual changing its name to FMIC. The group currently operates under the umbrella name of FM Global.

At December 31, 2022, FMIC Holdings, Inc. owned 100% of Appalachian’s outstanding common stock.

**Stockholder Dividends and Capital Contributions**

*Stockholder Dividends*

During the period covered by this examination, the following stockholder dividends and LLC distributions were paid by the Companies under examination:

<b>Year</b>	<b>Amount</b>	<b>Payor</b>	<b>Payee</b>
2018	\$175,000	Affiliated FM Insurance Company	Appalachian Insurance Company
	332,500	Affiliated FM Insurance Company	FMIC Holdings, Inc.
	19,000,000	FM Approvals, LLC	Factory Mutual Insurance Company
2019	175,000	Affiliated FM Insurance Company	Appalachian Insurance Company
	332,500	Affiliated FM Insurance Company	FMIC Holdings, Inc.
	22,900,000	FM Approvals, LLC	Factory Mutual Insurance Company
2020	175,000	Affiliated FM Insurance Company	Appalachian Insurance Company
	332,500	Affiliated FM Insurance Company	FMIC Holdings, Inc.
	15,000,000	FM Approvals, LLC	Factory Mutual Insurance Company
2021	175,000	Affiliated FM Insurance Company	Appalachian Insurance Company
	332,500	Affiliated FM Insurance Company	FMIC Holdings, Inc.
	22,000,000	FM Approvals, LLC	Factory Mutual Insurance Company
2022	175,000	Affiliated FM Insurance Company	Appalachian Insurance Company
	332,500	Affiliated FM Insurance Company	FMIC Holdings, Inc.
	19,700,000	FM Approvals, LLC	Factory Mutual Insurance Company

*Capital Contributions*

During the period covered by this examination, FMIC made the following capital contributions (net of returns of capital) to its non-insurer affiliates:

<b>Year</b>	<b>Amount</b>	<b>Payee</b>
2018	\$2,796,107	TSB Loss Control Consultants, Inc.
	2,215,032	FMRE Holding LLC
	59,608	FM Approvals LLC
	(347,673)	FMIC Holdings, Inc.
2019	279,700,000	FM Insurance Europe S.A.
	1,507,776	TSB Loss Control Consultants, Inc.
	(26,034,577)	FMRE Holdings LLC
	(72,217)	FMIC Holdings, Inc.
2020	228,550,603	FMRE Holdings LLC
	1,034,008	TSB Loss Control Consultants, Inc.
	32,702	FMIC Holdings, Inc.
2021	95,420,005	FMRE Holdings LLC
	1,498,300	TSB Loss Control Consultants, Inc.
	303,991	FMIC Holdings, Inc.
2022	35,605,339	FMRE Holdings LLC
	4,830,593	FMIC Holdings, LLC
	(9,578,025)	TSB Loss Control Consultants, Inc.

## **MANAGEMENT AND CONTROL**

### **Members**

FMIC's Charter provides that each natural person, partnership, association, corporation or legal entity insured on the mutual plan by FMIC shall be a Member of the Company during the life of its policy, but no longer, and at all meetings of the Members shall be entitled to one vote either in person or by proxy; provided, however, that where there is more than one insured under any policy, such insured shall nevertheless be deemed to be a single Member of FMIC for all purposes. FMIC may issue policies that do not entitle the insured to membership in FMIC or to participate in its surplus.

The bylaws, as amended, provide that the annual meeting of the Company shall be held at the principal offices of the Company, or at such other place as may be stated in the notice of the meeting, on the second Thursday of April in each year. Special meetings shall be called at any time by the Chairman of the Board, the Chairman of the Executive Committee, or the President, or by request in writing addressed to the Secretary by any five Directors.

At all meetings of the Members, the presence, in person or by proxy, of one-fifth of the Members shall be necessary to constitute a quorum. A vote of a smaller number of Members may adjourn the meetings from time to time. When a quorum is present at any meeting, all questions except amendments to the bylaws shall be decided by a majority vote of those present in person or by proxy.

### **Board of Directors**

The Companies' bylaws provides that the management of the business and affairs of the Company shall be vested in a Board of Directors, the number of which shall be fixed from time to time by the bylaws. At the Annual Meeting of the Company, directors shall be elected by the Members in the case of FMIC, and shareholders in the case of AFM and Appalachian, each for a term of three years, to succeed that class of directors whose term then expires. In case of any increase in the number of directors, one-third of the additional number shall be elected for the then unexpired portion of the term of those directors whose term expires in the year in which the increase is made; one-third for the unexpired portion of the term of those directors whose term expires in the year following that in which such increase is made, and one-third for the unexpired portion of the term of those directors whose term expires in the second year next after that in which such increase is

made. All directors shall serve until their successors are elected and qualified.

The bylaws provide that the number of directors shall be set at up to twenty-one (21) unless and until a different number shall be determined by action of the Board. If the Board of Directors shall decrease the number of directors, such decrease shall not be effective with respect to terms of directors then holding office until the expiration of each such directors term.

Directors shall be elected as prescribed by FMIC's Charter. For AFM and Appalachian, directors shall be elected by the shareholders. The directors may fill any vacancy in their own body occurring between annual meetings. For FMIC, the members at said meeting may fill any vacancy existing at the time of the annual meeting. For AFM and Appalachian, any vacancy existing at the time of the annual meeting may be filled by the shareholders at said meeting. The person chosen to fill any vacancy shall hold office for the unexpired term of the class in which such vacancy exists.

FMIC's bylaws stipulate that an organizational meeting of the Board of Directors shall be held immediately following the Annual Meeting of the Company for the election of officers and of committees, and for any other business that may come before said meeting. Thereafter, the Board of Directors shall hold regular meetings during the year at such times and places as it shall by vote prescribe.

A quorum of the Board of Directors shall consist of a majority, and a majority vote of the directors in attendance at any meeting of the Board of Directors shall, in the presence of a quorum, decide

its action. Less than a quorum of the Board of Directors may adjourn the meeting from time to time. When a meeting is adjourned to a specific time and place, notice of the adjourned meeting need not be given.

At all times, the Chairman of the Board, the Vice Chairman of the Board, if any, and the President shall be members of the Board. To be eligible for election as a director, all other individuals must be a senior officer, director, trustee, partner, or official representative of an entity that is a policyholder of FMIC. While the bylaws make no reference to a mandatory retirement age for directors, at age 75 an individual director may serve until the following annual meeting.

At December 31, 2022, the membership of the Board of Directors serving each of the Companies, together with the principal business or professional affiliation of each director is as follows:

<b>Name</b>	<b>Business Affiliation</b>	<b>Term Expires</b>
Frank T. Conner	Executive Vice President & CFO, Textron Inc.	2023
Colin R. Day	Chairman, Premier Foods, plc	2024
Frank J. Dellaquila	Senior Executive Vice President & CFO, Emerson Electric Company	2023
Michel Giannuzzi	Chairman, Verallia SA	2025
Glenn R. Landau	President & COO, Corrugated Supplies Company, LLC	2024
Thomas A. Lawson	Chairman, Factory Mutual Insurance Company	2024
John A. Luke, Jr.	Retired Chairman, WestRock Company	2023
Gracia C. Martore	Retired President & CEO, TEGNA Inc.	2023
Christine M. McCarthy	Senior Executive Vice President & CFO, The Walt Disney Company	2025
Thomas J. Quinlan, III	President & CEO, RR Donnelley & Sons Co., Inc.	2023
Malcolm C. Roberts	President & CEO, Factory Mutual Insurance Company	2025

Israel Ruiz	Founding Chairman of MIT's Engine; Former Executive Vice President and Treasurer, Massachusetts Institute of Technology	2023
David T. Walton	President & CEO, Caterpillar Financial Services Corporation	2025

## **Committees**

The Companies' bylaws, as amended, provide that the Board of Directors shall elect an Audit Committee, an Executive Committee and a Finance Committee to which certain powers and responsibilities may be delegated. The bylaws also provide that the Board may elect from their own number any other committees they deem advisable, and may delegate to such committees authority to exercise the powers of the Board with respect to the duties of the committee. Committees elected by the Board of Directors consisted of the following at December 31, 2022:

### **Executive Committee**

Thomas A. Lawson, *Chair*  
John A. Luke, Jr.  
Gracia C. Martore  
Christine M. McCarty  
Malcolm C. Roberts

### **Audit Committee**

Gracia C. Martore, *Chair*  
Colin R. Day  
Michel Giannuzzi  
David T. Walton  
Thomas J. Quinlan, III

### **Finance Committee**

Christine M. McCarthy, *Chair*  
Colin R. Day  
Glenn R. Landau  
Thomas A. Lawson  
Malcolm C. Roberts  
Israel Ruiz  
Frank J. Dellaquila

### **Compensation Committee**

John A. Luke, Jr., *Chair*  
Frank T. Connor  
Gracia C. Martore  
Christine M. McCarthy



## **Officers**

The Companies' bylaws provide that the Board of Directors shall elect the executive officers of the Company. Executive officers consist of a Chairman of the Board, a President, a Secretary, a Treasurer and, at the option of the Board of Directors, one or more Vice Chairmen of the Board, a Chairman of the Executive Committee, one or more Executive Vice Presidents, and one or more Senior Vice Presidents. The executive officers elected shall serve until the first meeting of the directors following the succeeding annual meeting of the Company and until their respective successors are elected and qualified, unless sooner removed by the vote of the Board of Directors. In addition, the directors may from time to time elect officers to hold office at the pleasure of the Board. Any person may hold more than one office, except that the offices of President and Secretary may not be held by the same person.

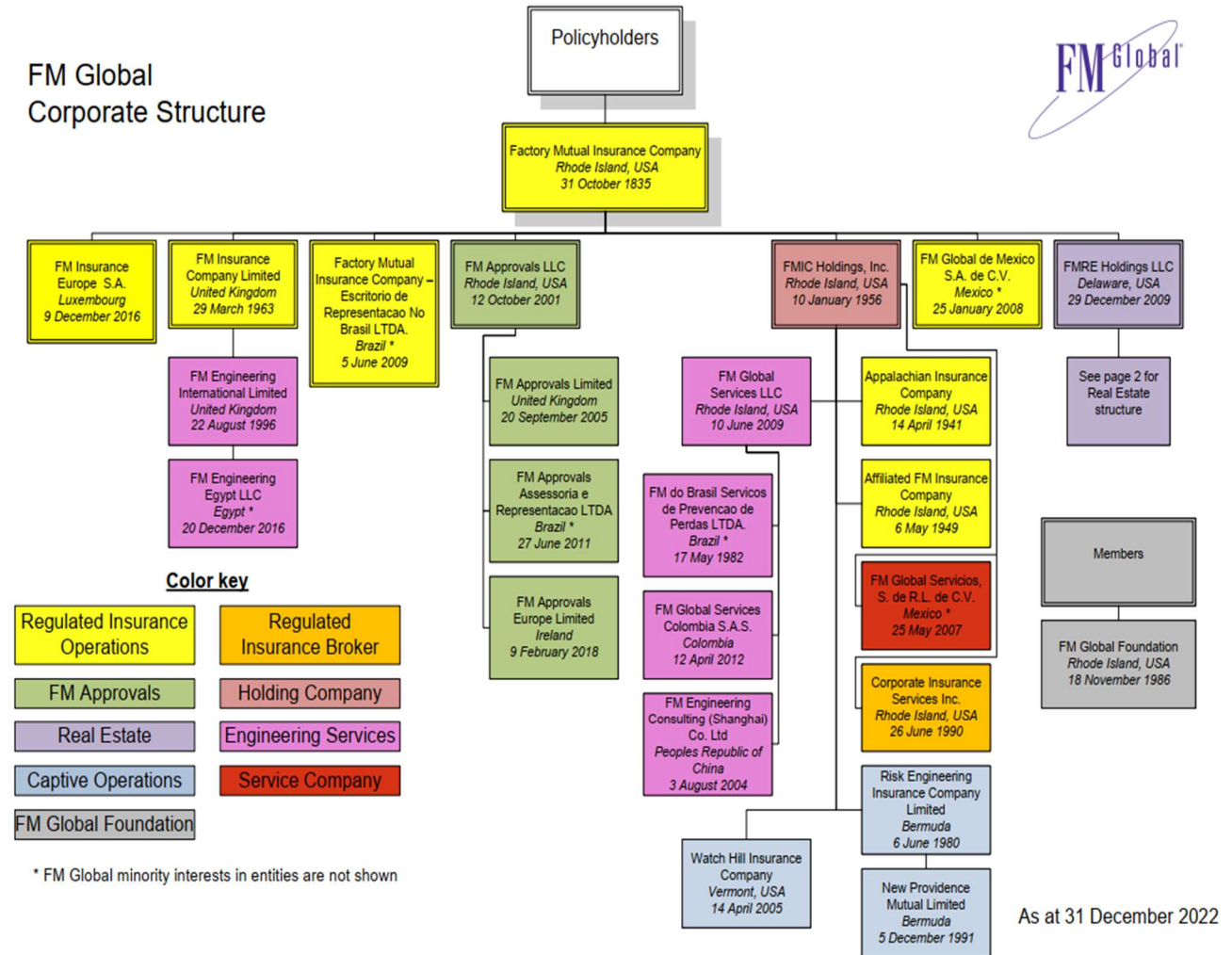
The executive officers of the Company shall have all the powers and privileges and shall perform all the duties incumbent upon them by law or prescribed by the bylaws or by the Board of Directors of the Company. The executive officers of the Company shall also have the authority to incur all necessary expenses for the proper conduct of the business of the Company.

The officers serving the FM Global Group, and their respective titles at December 31, 2022, are as follows:

<b>Name</b>	<b>Title</b>
Malcolm C. Roberts	President and Chief Executive Officer
Bret Ahnell	Chief Operating Officer
Kevin S. Ingram	Senior Executive Vice President and Chief Financial Officer
Deanna R. Fidler	Executive Vice President – People, Strategy, Technology
Sanjay Chawla	Executive Vice President – Chief Investment Officer
James R. Galloway	Executive Vice President – EMEA, Asia Pacific, Canada and Specialty Industries and AFM
George J. Plesce	Executive Vice President – United States, Latin America and Sales
Kevin L. Bradshaw	Senior Vice President – Chief Innovation Officer
Darren J. Benson	Senior Vice President – Claims
Andrew J. Bryson	Senior Vice President – Engineering and Research
James P. Thompson	Senior Vice President – APAC Division Manager
David R. Thoman	Senior Vice President – Eastern Division Manager
Lyndon D. Broad	Senior Vice President – Chief Underwriting Officer
David M. Johnson	Senior Vice President – Chief Client Experience Officer
Christopher M. Dempsey	Senior Vice President – EMEA Division Manager
Carl J. Slater	Senior Vice President – Human Resources
Philip Johnson	Senior Vice President – Chief Learning Officer
Ziad Alex S. Tadmoury	Senior Vice President – AFM Division Manager
Johnell R. Holly	Senior Vice President – Central Division Manager
Jonathan I. Mishara	Senior Vice President – Chief Legal Officer and Secretary
Thierry Masurel	Senior Vice President – Enterprise Services and Division Manager
James P. O’Brien	Senior Vice President – Canada and Specialty Industries Division Manager
Srinivasan Krishnamurthy	Senior Vice President – Chief Strategy and Information Officer
Lynette K. Schultheis	Senior Vice President – Western Division Manager
Denise A. Hebert	Vice President and Treasurer

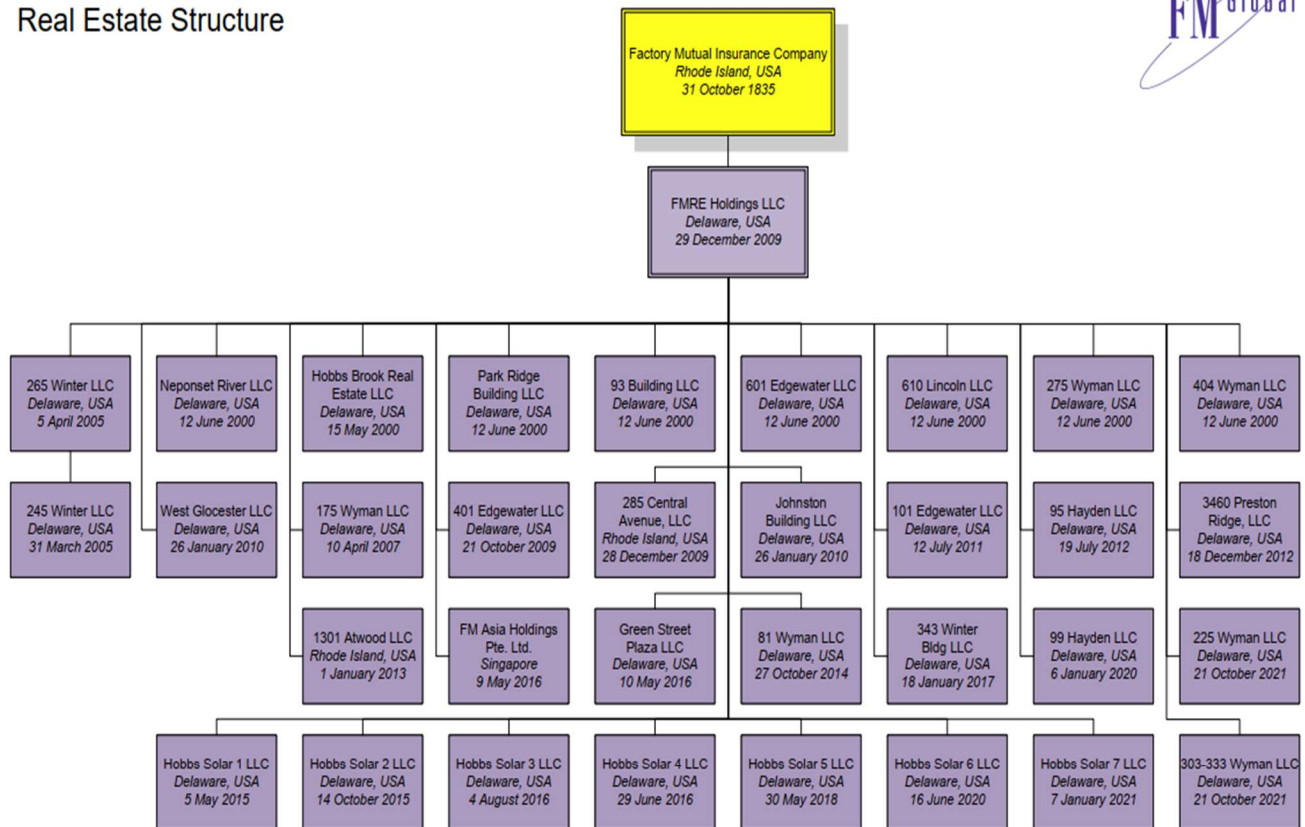
## Organizational Structure

The following represents an organizational chart, as of December 31, 2022, which reflects the identities and interrelationships between FMIC, its affiliated insurers and other members of the holding company system:



An organizational chart of the FM Global real estate structure follows:

FM Global  
Real Estate Structure



**Color key**

Insurance Operations

Real Estate

As at 31 December 2022

**Intercompany Agreements**

Following is a summary of the primary intercompany agreements in effect between FMIC and the various members of the FM Global Group holding company system as of December 31, 2022:

Performance Guarantee

Effective January 1, 2004 FMIC, as the sole shareholder of FM Insurance Company Limited (“FMI”), executed a Performance Guarantee, under which FMIC guarantees the full, prompt and

complete performance by FMI of its lawful obligations under its contracts of insurance or reinsurance. FMIC further guarantees the unconditional payment when due of all losses, unearned premium and other obligation of such insurance or reinsurance. The Performance Guarantee shall remain in full force and effect until such time, if ever, as FMIC sells FMI.

Effective January 1, 2014, FMIC, as owner of all the issued and outstanding common stock of FMIC Holdings, Inc., the owner of all the issued and outstanding common stock of AFM, entered into a Performance Guarantee agreement for the benefit of the policyholders of AFM, under which FMIC guarantees the full performance by AFM of its lawful obligations with respect to contracts of insurance and reinsurance issued by AFM. The Performance Guarantee shall remain in full force and effect until such time, if ever, as FMIC sells AFM.

Effective January 1, 2018, FMIC, as the sole shareholder of FM Insurance Europe S.A. (“FMIE”), executed a Performance Guarantee, under which FMIC guarantees the full, prompt, and complete performance by FMIE of its lawful obligations under its contracts of insurance or reinsurance. FMIC further guarantees the unconditional payment when due of all losses, unearned premium and other obligation of such insurance or reinsurance. The Performance Guarantee shall remain in full force and effect until such time, if ever, as FMIC sells FMIE.

#### *Intercompany Cash Management Agreement*

Effective February 1, 2015, FMIC entered into a Cash Management Agreement (“Agreement”) with several affiliates. Under the terms of the Agreement, any party (“Lender”) may from time-to-time loan to another (“Borrower”) such amounts as shall be determined and mutually agreed

upon by and between the Lender and Borrower, provided that Lender at all times shall maintain sufficient cash amounts for normal working requirements. All loans made under the Agreement are made on an unsecured basis and as of the end of any quarter the indebted amount due from any company shall not exceed \$400,000,000. Indebtedness amounts in excess of the limit are required to be settled within 30 days. Under the terms of the Agreement, interest on any loaned money shall be payable at an annual rate equal to the simple average of the weekly ninety-day U.S. Treasury Bill rates appearing in the Federal Reserve Data section of the *Wall Street Journal*. The settlement terms require that outstanding balances of principal and accrued interest shall be due and payable no later than sixty (60) days following the last day of each calendar quarter. Lender may demand any part, or all funds loaned under the Agreement by giving three (3) business days' notice to the Borrower.

#### *Intercompany Tax Sharing Agreement*

Effective March 21, 2022, FMIC and certain subsidiaries entered into a tax sharing agreement. This agreement provides for the allocation of the consolidated federal tax liability of the members of the U.S. consolidated tax group. The tax liability of each member is determined on a separate company basis, with benefit given for losses and credits utilized in the consolidated return. Items of income, loss, tax, and credits that are determined on a consolidated level are generally allocated back to the subsidiaries on a pro-rata share of the relevant item giving rise to such item of income, loss, tax, or credit. Final amounts are settled within sixty (60) days of filing of the consolidated federal or combined state returns.

### Management and Service Agreements

Effective July 1, 2001, FMIC entered into two separate Management and Service Agreements with AFM and Appalachian. Under the terms of each agreement, FMIC provides AFM and Appalachian with the personnel, space, equipment and facilities necessary to conduct business. The agreements stipulate that FMIC shall be paid a monthly fee to be paid within fifty-five (55) days after the end of the month to which it applies. The monthly fee shall be an amount determined by product line cost analysis.

Effective September 1, 2017, FMIC entered into a Mutual Services Agreement with FMIE for the provision of core business services, general management including executive management, operational support, and supportive services.

Effective January 1, 2017, FMIC entered into a Mutual Services Agreement with FMI for the provision of core business services, general management including executive management, operational support, and supportive services.

### **TERRITORY AND PLAN OF OPERATION**

FMIC is a specialist niche insurer providing first-party commercial property insurance and reinsurance to large industrial and institutional companies, and AFM provides similar services but modified to the needs of slightly smaller commercial clients. FMIC and AFM offer all-risks coverage and select perils coverage for property damage and time element (business interruption), including fire and allied lines, inland and ocean marine, earthquake, and boiler and machinery. In addition, AFM writes a very small homeowners program. Appalachian is licensed to write surplus

lines business but has not written new business since 2018.

FM Global is afforded a distinct competitive advantage over most insurers by virtue of its professional property engineering expertise, inspection and loss prevention services, training, and research. These bundled professional services assist in the identification, assessment, and management of property risks. A majority of FM Global's policyholders maintain worldwide operating facilities and are typically large industrial companies in varied manufacturing and servicing industries. Business is produced on a direct basis and through brokers.

FMIC and AFM are licensed and transacting business in all states, the District of Columbia, American Samoa, Guam, Northern Mariana Islands, Puerto Rico, the Virgin Islands, Canada, Australia and numerous other countries. Appalachian has not transacted business since 2018.

FMIC owns subsidiary companies with local insurance licenses, such as FMI, a United Kingdom insurer, FM Global de Mexico S.A. de C.V. ("FM Mexico"), a Mexican insurer and FMIE, a Luxembourg insurer. The Company arranges local insurance in foreign countries on behalf of clients through a network of local insurers, called World Reach Partners. FMIC reinsures the World Reach Partners. FMIC also has branches in seven Asia Pacific jurisdictions; Australia, Hong Kong, India, Labuan, South Korea, Singapore, and New Zealand.

FMI provides coverage for U.K locations from its U.K.-based headquarters. FMIE provides coverage for EU locations utilizing branch offices in France, Belgium, Italy, Germany, The Netherlands, Spain, and Sweden. FMIE is also authorized to underwrite policies in Switzerland



via a Swiss branch. Effective January 1, 2020, FMI retains 60% of its premium volume, net of third-party reinsurance and FMIE retains 55% of its premium volume, net of third-party reinsurance.

Risk Engineering Insurance Company Limited (“REICL”) is incorporated in Bermuda and its ultimate parent is FMIC. REICL is registered in Bermuda as a Class 3A insurer under the Bermuda Insurance Act of 1978, as amended. REICL provides facultative reinsurance to its parent and affiliates.

## **REINSURANCE**

### **Ceded Reinsurance**

FMIC and its subsidiaries, AFM, Appalachian, FMI, FM Mexico, FMIE and such other companies as may be controlled by these companies, if any, and their Quota Share Reinsurers (collectively referred to as the “Companies” for purposes of this section) are named reinsureds on the following reinsurance treaties in force at December 31, 2022:

- **Core Reinsurance Treaty (“CRT”)**

Effective July 1, 2022, the Companies entered into a reinsurance treaty covering risks classified as property, boiler and machinery, and non-physical damage per the Companies’ original policies. The limit of coverage is \$200,000,000 in respect to each risk declared, each loss. The maximum recovery in any one loss occurrence shall not exceed \$750,000,000. As respects to earth movement losses in the Pacific Northwest Region (the states of Washington, Oregon, and the Canadian Province of British Columbia), the maximum recovery per occurrence is \$850,000,000. The CRT can be used on a pro rata or excess of loss basis.

- Property Excess of Loss Reinsurance Contract

Effective July 1, 2022, the Companies entered into a joint protection program which provides per risk and catastrophe reinsurance on business classified as property, boiler and machinery, and non-physical damage. The limit and retention for each layer as of December 31, 2022, is as follows:

PER RISK	CATASTROPHE
	\$100M excess of \$1,500M (North America Earthquake Top & Drop)
	\$25M excess of \$1,475M (North America Hurricane and Earthquake)
\$500M excess of \$900M	\$275M excess of \$1,200M (North America Hurricane, Flood and Earthquake)
	\$400M excess of \$800M (Worldwide)
\$400M excess of \$500M	\$350M excess of \$450M (Worldwide)
\$200M excess of \$300M	\$450M Catastrophe Retention
\$300M Per Risk Retention	

As part of the Per Risk Excess of Loss contract, there is a lower attachment point set for AFM business only as follows:

PER RISK	CATASTROPHE
	\$100M excess of \$1,500M (North America Earthquake Top & Drop)
	\$25M excess of \$1,475M (North America Hurricane and Earthquake)
\$500M excess of \$900M	\$275M excess of \$1,200M (North America Hurricane, Flood and Earthquake)
	\$400M excess of \$800M (Worldwide)
\$400M excess of \$500M	\$350M excess of \$450M (Worldwide)
\$200M excess of \$300M	\$450M Catastrophe Retention
\$225M excess of \$75M (AFM only Risk Drop)	
\$75M Per Risk Retention (AFM only)	

- Maximum Capacity Treaty (“MCT”)

This automatic treaty is comprised of two separate sections. First, for the reinsured FM Global entities, excluding AFM, the treaty is used on the Company's best of class location risks. Second, exclusive to AFM only, the treaty is used on a high excess, gross policy limit basis. Both sections of this treaty exclude flood and earth movement but include fire following.

For the reinsured FM Global entities, excluding AFM, the use of this treaty is on a location basis within the reinsurance line setting structure when reinsurance is needed above the Companies' generated maximum net capacity for the risk. The risk limit is \$400,000,000 per cession. It is used on an excess of loss basis.

The AFM exclusive use of this treaty is on a gross policy limit basis when the need for a gross policy limit is greater than \$500,000,000. This treaty can provide up to \$500,000,000 of gross policy limit capacity for an individual client.

- Woodworking Automatic Facility (“WWF”)

Effective April 1, 2022, the Companies entered into a reinsurance treaty whereby business classified as property, boiler and machinery, and non-physical damage per the Companies' original policies, is used on an excess of loss basis. This treaty is used only for woodworking business and the risk limit is \$70,000,000 in excess of \$30,000,000.

- Marine Cargo Excess of Loss Reinsurance Contract

Effective April 1, 2022, the Companies entered into an excess of loss reinsurance treaty which

protects the net writings of its ocean cargo book of business. The treaty includes two layers which provide coverage up to a maximum of \$25,000,000 in excess of \$5,000,000.

- Figure 5 Facility

Effective December 1, 2022, the Companies entered into a reinsurance treaty whereby business written and classified as “Figure 5” business or its equivalent, property, boiler and machinery and non-physical damage per the Companies’ original policies, is used on an excess of loss basis. Under the terms of the Figure 5 Facility, the reinsurance limit is \$50,000,000 for each and every risk, each and every loss in excess of no less than \$75,000,000. This treaty excludes flood and earth movement but includes fire following.

### **Intercompany Reinsurance**

The following is a summary of the primary reinsurance agreements in force at December 31, 2022, that have been entered into between affiliated companies within the FM Global Group insurance holding company system:

- Tripartite Quota Share Pooling Agreement

FMIC participates in a Tripartite Quota Share Pooling Agreement (“Pooling Agreement”) with AFM and Appalachian. Under the terms of the Pooling Agreement which became effective on January 1, 1982, the parties agreed to pool all earned premiums, incurred losses, loss adjustment expenses and underwriting expenses. The pooling percentages, amended as of January 1, 2014, are FMIC - 86%, AFM - 12% and Appalachian - 2%. The percentages approximate the policyholders’ surplus of each company to the combined surplus for the three Companies.

- Property Per Risk Excess of Loss Treaty

Effective January 1, 1982, FMIC entered into a Property Per Risk Excess of Loss Treaty with Appalachian whereby FMIC reinsures all business written directly or assumed by Appalachian from other companies. Effective January 1, 2013, the treaty was amended to provide for 100% reinsurance coverage of the excess of the amount of any and each incurred risk, to the extent exceeding 10% of the total amount of capital and surplus as of the most recent calendar year.

- Quota Share Reinsurance Agreement (“FMGM-1”)

Effective June 1, 2008, FMIC and FM Mexico entered into a quota share reinsurance agreement whereby FMIC will indemnify FM Mexico for 99.94% of the ultimate net loss of the per risk occurrence or the catastrophe occurrence in excess of each policies’ local base deductibles up to the ultimate net loss to FM Mexico. It also covers 100% of the ultimate net loss of the per risk occurrence or of the catastrophe occurrence in excess of each policies’ local base deductibles up to the ultimate net loss to FM Mexico for shared-and-layered programs.

- Quota Share Reinsurance Agreement (“FM-2”)

Effective January 1, 2008, FMIC entered into a quota share reinsurance agreement (“FM-2 agreement”) with FMI and its subsidiaries whereby FMIC reinsures all business classified as property and boiler and machinery. Pursuant to the most recent amendment effective January 1, 2020, FMIC reinsures 75% of the ultimate net loss in excess of £650,000 up to and including an ultimate net loss of the sterling equivalent of the per risk attachment point for a single location occurrence or the catastrophe attachment point for a multiple location occurrence of the Property Excess of Loss Reinsurance Contract. FMIC also reinsures 100% of the ultimate net loss in excess

of the per risk attachment point for a single location occurrence or of the catastrophe attachment point for a multiple location occurrence for which FMI is not reinsured under the Property Excess of Loss Reinsurance Contract. If the FMI combined ratio exceeds 125% FMIC agrees to pay FMI such amount as would reduce the FMI combined ratio to 125%. The FM-2 agreement supersedes a previous agreement entered into between the parties that became effective on January 1, 2004.

- Excess of Loss Reinsurance Agreement – ‘Category C’ Business (“FMLTD-3”)

Effective June 1, 1963, the legacy companies of FMIC entered into an excess of loss reinsurance agreement with FMI covering all of FMI’s policies, contracts, binders and other obligations of insurance and reinsurance designated by FMI as “Category C.” “Category C” relates to direct policies written by FMI in the United Kingdom between 1963 and 1967 for discontinued casualty coverage and casualty policies assumed by FMI in the United Kingdom between 1963 and 1967. The treaty terms, as amended, stipulates that the legacy companies will reinsure losses in excess of £5,000 up to a maximum of £50,000 each and every loss occurrence. As a result of the merger of the legacy companies in 1999, FMIC became the successor-in-interest to the FMLTD-3 agreement.

- Stop Loss Reinsurance Agreement – ‘Category C’ Business (“FMLTD-5”)

Effective October 1, 1972, the legacy companies of FMIC entered into a stop loss reinsurance agreement with FMI covering all of FMI’s policies, contracts, binders and other obligations of insurance and reinsurance designated by FMI as “Category C” (See FMLTD-3 treaty above for description). The treaty terms, as amended, stipulates that FMIC will reinsure 100% of all losses not covered by the FMLTD-3 treaty, up to an overall limit of £15,000,000 subject to an aggregate deductible of £900,000.

As a result of the merger of the legacy companies in 1999, FMIC became the successor-in-interest to the FMLTD-5 agreement.

- Intercompany Reinsurance Treaty with REICL

Effective January 1, 2013, FMIC and its affiliates entered into a reinsurance agreement with REICL. FMIC may cede, in whole or in part, on a pro-rata or an excess basis, new or renewal business classified as property and/or boiler and machinery and/or non-physical damage, pursuant to FMIC's policies. REICL provides reinsurance at 100% of the ultimate net loss.

- Stop Loss Reinsurance Agreement – Singapore (“SI-1”)

Effective January 1, 2014, the FMIC Singapore branch entered into a stop loss reinsurance agreement with AFM, stating that if as a result of net incurred losses, FMIC Singapore experiences a combined ratio of over 125%, then AFM agrees to pay FMIC Singapore such amount as would reduce the combined ratio to 125%.

- Stop Loss Reinsurance Agreement – Hong Kong (“HK-1”)

Effective March 1, 2014, the FMIC Hong Kong branch entered into a stop loss reinsurance agreement with AFM, stating that if as a result of net incurred losses, FMIC Hong Kong experiences a combined ratio of over 125%, then AFM agrees to pay FMIC Hong Kong such amount as would reduce the combined ratio to 125%.

- Stop Loss Reinsurance Agreement – Labuan (“LB-1”)

Effective March 1, 2014, the FMIC Labuan branch entered into a stop loss reinsurance agreement

with AFM, stating that if as a result of net incurred losses, FMIC Labuan experiences a combined ratio of over 125%, then AFM agrees to pay FMIC Labuan such amount as would reduce the combined ratio to 125%.

- Stop Loss Reinsurance Agreement – Australia (“AUS-1”)

Effective October 1, 2014, the FMIC Australia branch entered into a stop loss reinsurance agreement with AFM, stating that if as a result of net incurred losses, FMIC Australia experiences a combined ratio of over 125%, then AFM agrees to pay FMIC Australia such amount as would reduce the combined ratio to 125%.

- Stop Loss Reinsurance Agreement – New Zealand (“NZ-1”)

Effective January 1, 2016, the FMIC New Zealand branch entered into a stop loss reinsurance agreement with AFM, stating that if as a result of net incurred losses, FMIC New Zealand experiences a combined ratio of over 125%, then AFM agrees to pay FMIC New Zealand such amount as would reduce the combined ratio to 125%.

- Stop Loss Reinsurance Agreement – India

Effective March 22, 2022, the FMIC India branch entered into a stop loss reinsurance agreement with AFM, stating that if as a result of net incurred losses, FMIC India experiences a combined ratio of over 125%, then AFM agrees to pay FMIC India such amount as would reduce the combined ratio to 125%.



- FM Insurance Europe S.A. Reinsurance Agreement (“L1”)

Effective May 17, 2017, FMIC entered into a reinsurance agreement (“L1” agreement) with FMIE whereby FMIC reinsures all business classified as property and boiler and machinery. Under this agreement, FMIC reinsures 75% of the ultimate net loss in excess of Euro 1,000,000 up to and including an ultimate net loss of the Euro equivalent of the per risk attachment point for a single location occurrence or the catastrophe attachment point for a multiple location occurrence of the Property Excess of Loss Reinsurance Contract. FMIC also reinsures 100% of the ultimate net loss in excess of the per risk attachment point for a single location occurrence or of the catastrophe attachment point for a multiple location occurrence for which FMIE is not reinsured under the Property Excess of Loss Reinsurance Contract. If the FMIE combined ratio exceeds 125% FMIC agrees to pay FMIE such amount as would reduce the combined ratio to 125%.

### **Assumed Reinsurance**

The FM Global Group’s assumed reinsurance revenue for the year ending December 31, 2022, is comprised of assumed business from the World Reach Partners network, Mutual Boiler Re business, discontinued casualty business, mandatory and voluntary pools, and business derived from where FM Global fronts for other insureds or takes a share of the program by way of reinsurance. The World Reach Partners network is used by FM Global to cover policyholder property in countries where the Company is not licensed.

## FINANCIAL STATEMENTS

The following financial statements are based on the statutory financial statements filed by FMIC, AFM and Appalachian, with the Rhode Island Insurance Division and present the financial condition of each Company for the period ending December 31, 2022. The accompanying comments on financial statements reflect examination adjustments to the amounts reported in the annual statements and should be considered an integral part of the financial statements:

Comparative Statement of Assets  
December 31, 2022 and December 31, 2017

Comparative Statement of Liabilities Surplus and Other Funds  
December 31, 2022 and December 31, 2017

Statement of Income  
Year Ended December 31, 2022

Reconciliation of Capital and Surplus  
December 31, 2017 to December 31, 2022

Analysis of Examination Adjustments  
December 31, 2022

**FACTORY MUTUAL INSURANCE COMPANY**  
**Comparative Statement of Assets**  
**December 31, 2022 and December 31, 2017**

	December 31, 2022	December 31, 2017	Increase (Decrease)
Bonds	\$5,797,022,400	\$4,522,442,521	\$1,274,579,879
Preferred stocks	1,683,238	-	1,683,238
Common stocks	12,514,228,613	10,220,077,668	2,294,150,945
Cash, cash equivalents, and short-term investments	1,161,781,146	1,030,053,090	131,728,056
Derivatives	676,620	-	676,620
Other invested assets	3,506,698,039	1,903,317,568	1,603,380,471
Receivables for securities	43,234,079	1,705,619	41,528,460
Securities lending reinvested collateral assets	-	44,119,498	(44,119,498)
Investment income due and accrued	48,631,099	54,078,664	(5,447,565)
Uncollected premiums and agents' balances in the course of collection	1,143,699,398	527,414,381	616,285,017
Amounts recoverable from reinsurers	180,190,311	164,316,329	15,873,982
Funds held by or deposited with reinsured companies	6,022,513	13,653,457	(7,630,944)
Current federal and foreign income tax recoverable and interest thereon	395,698,136	488,828,432	(93,130,296)
Net deferred tax asset	23,249,792	-	23,249,792
Guaranty funds receivable or on deposit	1,987,287	161,009	1,826,278
Electronic data processing equipment	5,543,915	4,636,604	907,311
Aggregate write-ins for other than invested assets	228,634,903	180,660,055	47,974,848
Total Assets	<u>\$25,058,981,489</u>	<u>\$19,155,464,895</u>	<u>\$5,903,516,594</u>

**FACTORY MUTUAL INSURANCE COMPANY**  
**Comparative Statement of Liabilities, Surplus and Other Funds**  
**December 31, 2022 and December 31, 2017**

	December 31, 2022	December 31, 2017	Increase (Decrease)
Losses	\$2,773,513,065	\$3,326,000,928	(\$552,487,863)
Reinsurance payable on paid losses and loss adjustment expenses	77,739,013	29,520,143	48,218,870
Loss adjustment expenses	164,272,103	210,946,724	(46,674,621)
Other expenses	823,140,448	514,970,773	308,169,675
Taxes, licenses and fees	17,102,476	17,125,138	(22,662)
Net deferred tax liability	-	562,454,668	(562,454,668)
Unearned premiums	2,225,361,692	1,260,073,503	965,288,189
Advance premium	3,260,971	6,574,803	(3,313,832)
Ceded reinsurance premiums payable	461,924,067	225,695,866	236,228,201
Funds held by company under reinsurance treaties	214,071,809	7,852,457	206,219,352
Amounts withheld or retained by company for account of others	26,167,292	9,261,763	16,905,529
Remittance and items not allocated	-	6,599,890	(6,599,890)
Provision for reinsurance	137,106,415	141,920,647	(4,814,232)
Net adjustments in assets and liabilities due to foreign exchange rates	211,432,774	138,613,653	72,819,121
Payable to parent, subsidiaries and affiliates	115,550,237	63,531,926	52,018,311
Payable for securities	87,322,427	12,340,459	74,981,968
Payable for securities lending	-	44,119,498	(44,119,498)
Aggregate write-ins for liabilities	160,578,344	76,085,052	84,493,292
Total Liabilities	<u>\$7,498,543,133</u>	<u>\$6,653,687,891</u>	<u>\$844,855,242</u>
Guaranty funds	\$1,250,000	\$1,250,000	0
Unassigned funds (surplus)	<u>17,559,188,356</u>	<u>12,500,527,004</u>	<u>5,058,661,352</u>
Total Capital and Surplus	<u>\$17,560,438,356</u>	<u>\$12,501,777,004</u>	<u>\$5,058,661,352</u>
Total Liabilities, Surplus and Other Funds	<u>\$25,058,981,489</u>	<u>\$19,155,464,895</u>	<u>\$5,903,516,594</u>

**FACTORY MUTUAL INSURANCE COMPANY**  
**Statement of Income**  
**Year Ended December 31, 2022**

**UNDERWRITING INCOME**

Premiums earned	<u>\$4,462,466,284</u>
Losses incurred	2,267,358,237
Loss adjustment expenses incurred	115,588,963
Other underwriting expenses incurred	<u>1,184,352,933</u>
Total underwriting deductions	<u>3,567,300,133</u>
Net underwriting gain (loss)	<u>895,166,151</u>

**INVESTMENT INCOME**

Net investment income earned	199,696,610
Net realized capital gains (losses) less capital gains tax	<u>(122,897,224)</u>
Net investment gain (loss)	<u>76,799,386</u>

**OTHER INCOME**

Net gain (loss) from agents' balances or premium balances charged off	(282,416)
Aggregate write-ins for miscellaneous income	<u>38,918,584</u>
Total other income	<u>38,636,168</u>
Net income after dividends to policyholders, after capital gains tax and before all other federal and foreign income taxes	<u>1,010,601,705</u>
Federal and foreign income taxes incurred	<u>(125,573,323)</u>
Net income	<u>\$1,136,175,028</u>

**FACTORY MUTUAL INSURANCE COMPANY**  
**Reconciliation of Capital and Surplus**  
**December 31, 2017 to December 31, 2022**

Capital and Surplus, December 31, 2017			\$12,501,777,004
	<u>Gains</u>	<u>Losses</u>	
Net income	\$4,330,417,448		
Change in net unrealized capital gains of (losses) less capital gains tax	655,735,416		
Change in net unrealized foreign exchange capital gains (loss)		148,234,554	
Change in net deferred income tax	342,401,650		
Change in nonadmitted assets		602,971,832	
Change in provision for reinsurance	4,814,232		
Aggregate write-ins for gains and losses in surplus	<u>476,498,992</u>		
Total gains and losses	<u>\$5,809,867,738</u>	<u>\$751,206,386</u>	
Net change in capital and surplus for the period			<u>5,058,661,352</u>
Capital and Surplus, December 31, 2022			<u>\$17,560,438,356</u>

**FACTORY MUTUAL INSURANCE COMPANY**  
**Analysis of Examination Adjustments**  
**December 31, 2022**

The examination of FMIC, performed as of December 31, 2022, did not disclose any material misstatements to the financial statements contained in its 2022 Annual Statement filing. Accordingly, the amounts reported by FMIC have been accepted for purposes of this report.

**AFFILIATED FM INSURANCE COMPANY**  
**Comparative Statement of Assets**  
**December 31, 2022 and December 31, 2017**

	December 31, 2022	December 31, 2017	Increase (Decrease)
Bonds	\$1,644,818,022	\$1,368,166,033	\$276,651,989
Common stocks	1,679,132,493	1,357,295,441	321,837,052
Cash, cash equivalents and short-term investments	171,799,190	194,672,989	(22,873,799)
Other invested Assets	198,213,873	-	198,213,873
Receivable for securities	8,374,422	-	8,374,422
Securities lending reinvested collateral assets	-	42,880,694	(42,880,694)
Investment income due and accrued	12,011,617	12,364,108	(352,491)
Uncollected premiums and agents' balances in the course of collection	256,090,138	143,778,093	112,312,045
Amounts recoverable from reinsurers	78,836,526	11,363,640	67,472,886
Funds held by or deposited with reinsured companies	13,398	13,398	-
Current federal and foreign income tax recoverable and interest thereon	-	20,444,583	(20,444,583)
Guaranty funds receivable or on deposit	392,206	42,864	349,342
Receivables from parent, subsidiaries and affiliates	311,626,344	19,455	311,606,889
Aggregate write-ins for other-than-invested assets	14,997,639	11,982,750	3,014,889
Total Assets	<u>\$4,376,305,868</u>	<u>\$3,163,024,048</u>	<u>\$1,213,281,820</u>



**AFFILIATED FM INSURANCE COMPANY**  
**Comparative Statement of Liabilities, Surplus and Other Funds**  
**December 31, 2022 and December 31, 2017**

	December 31, 2022	December 31, 2017	Increase (Decrease)
Losses	\$629,867,696	\$569,005,714	\$60,861,982
Reinsurance payable on paid losses and loss adjustment expenses	1,380,329	41,350,363	(39,970,034)
Loss adjustment expenses	74,203,329	64,197,922	10,005,407
Other expenses	294,786	438,445	(143,659)
Taxes, licenses and fees	8,585,694	6,606,128	1,979,566
Current federal and foreign income taxes	57,203,735	-	57,203,735
Net deferred tax liability	32,388,632	92,708,000	(60,319,368)
Unearned premiums	581,059,221	383,839,642	197,219,579
Advance premium	157,572	524,622	(367,050)
Dividends declared and unpaid:			
Policyholders	303,825	240,451	63,374
Ceded reinsurance premiums payable	162,944,331	107,309,496	55,634,835
Funds held by company under reinsurance treaties	9,937,500	-	9,937,500
Amounts withheld or retained by company for account of others	337,054	501,075	(164,021)
Remittances and items not allocated	-	4,179,184	(4,179,184)
Provision for reinsurance	4,528,635	3,640,341	888,294
Net adjustments in assets and liabilities due to foreign exchange rates	92,958,529	47,352,088	45,606,441
Payable for securities	9,031,507	-	9,031,507
Payable for securities lending	-	42,880,694	(42,880,694)
Aggregate write-ins for liabilities	36,159,511	18,377,417	17,782,094
<b>Total Liabilities</b>	<b>\$1,701,341,886</b>	<b>\$1,383,151,582</b>	<b>\$318,190,304</b>
Common capital stock	4,000,000	4,000,000	-
Preferred capital stock	7,250,000	7,250,000	-
Gross paid in and contributed surplus	270,210,661	270,210,661	-
Unassigned funds (surplus)	2,393,503,321	1,498,411,805	895,091,516
<b>Total Capital and Surplus</b>	<b>2,674,963,982</b>	<b>1,779,872,466</b>	<b>895,091,516</b>
<b>Total Liabilities, Surplus and     Other Funds</b>	<b>\$4,376,305,868</b>	<b>\$3,163,024,048</b>	<b>\$1,213,281,820</b>

**AFFILIATED FM INSURANCE COMPANY**  
**Statement of Income**  
**Year Ended December 31, 2022**

UNDERWRITING INCOME

Premiums earned	<u>\$671,590,342</u>
Losses incurred	316,375,566
Loss adjustment expenses incurred	16,128,693
Other underwriting expenses incurred	<u>165,258,549</u>
Total underwriting deductions	<u>497,762,808</u>
Net underwriting gain (loss)	<u>173,827,534</u>

INVESTMENT INCOME

Net investment income earned	63,852,640
Net realized capital gains (losses) less capital gains tax	<u>(21,731,343)</u>
Net investment gain (loss)	<u>42,121,297</u>

OTHER INCOME

Net gain (loss) from agents' balances or premium balances charged off	(6,010)
Aggregate write-ins for miscellaneous income	<u>(1,797,144)</u>
Total other income	<u>(1,803,154)</u>
Net income before dividends to policyholders, after capital gains tax and before all other federal and foreign income taxes	214,145,677
Dividends to policyholders	<u>599,060</u>
Net income after dividends to policyholders, after capital gains tax and before all other federal and foreign income taxes	213,546,617
Federal and foreign income taxes incurred	<u>46,969,997</u>
Net income	<u><u>\$166,576,620</u></u>

**AFFILIATED FM INSURANCE COMPANY**  
**Reconciliation of Capital and Surplus**  
**December 31, 2017 to December 31, 2022**

Capital and Surplus, December 31, 2017			\$1,779,872,466
	<u>Gains</u>	<u>Losses</u>	
Net income	\$986,152,509		
Change in net unrealized capital gains or (losses) less capital gains tax		86,945,606	
Change in net unrealized foreign exchange capital gains (loss)		31,348,957	
Change in net deferred income tax	37,097,498		
Change in non-admitted assets		6,438,134	
Change in provision for reinsurance		888,294	
Dividends to stockholders		<u>2,537,500</u>	
Total gains and losses	<u>\$1,023,250,007</u>	<u>\$128,158,491</u>	
Net change in capital and surplus for the period			<u>895,091,516</u>
Capital and Surplus, December 31, 2022			<u>\$2,674,963,982</u>

**AFFILIATED FM INSURANCE COMPANY**  
**Analysis of Examination Adjustments**  
**December 31, 2022**

The examination of AFM, performed as of December 31, 2022, did not disclose any material misstatements to the financial statements contained in its 2022 Annual Statement filing. Accordingly, the amounts reported by AFM have been accepted for purposes of this report.

**APPALACHIAN INSURANCE COMPANY**  
**Comparative Statement of Assets**  
**December 31, 2022 and December 31, 2017**

	<u>December 31,</u> <u>2022</u>	<u>December 31,</u> <u>2017</u>	<u>Increase</u> <u>(Decrease)</u>
Bonds	\$277,105,195	\$218,261,238	\$58,843,957
Preferred stocks	2,500,000	2,500,000	0
Cash, cash equivalents and short-term investments	40,163,473	78,037,376	(37,873,903)
Securities lending reinvested collateral assets	-	1,166,402	(1,166,402)
Investment income due and accrued	1,668,101	1,302,251	365,850
Uncollected premiums and agents' balances in the course of collection	25,706,650	16,982,930	8,723,720
Amounts recoverable from reinsurers	380,745	458,108	(77,363)
Current federal and foreign income tax recoverable and interest thereon	-	7,177,826	(7,177,826)
Net deferred tax asset	21,717	86,000	(64,283)
Aggregate write-ins for other than invested assets	1,969,338	-	1,969,338
Total Assets	<u>\$349,515,219</u>	<u>\$325,972,131</u>	<u>\$23,543,088</u>

**APPALACHIAN INSURANCE COMPANY**  
**Comparative Statement of Liabilities, Surplus and Other Funds**  
**December 31, 2022 and December 31, 2017**

	<u>December 31,</u> <u>2022</u>	<u>December 31,</u> <u>2017</u>	<u>Increase</u> <u>(Decrease)</u>
Losses	\$59,316,297	\$60,904,656	(\$1,588,359)
Reinsurance payable on paid losses and loss adjustment expenses	19,072,502	27,105,763	(8,033,261)
Loss adjustment expenses	10,906,457	9,299,330	1,607,127
Taxes, licenses and fees	400	2,497	(2,097)
Current federal and foreign income taxes	5,443,363	-	5,443,363
Unearned premiums	-	738	(738)
Ceded reinsurance premiums payable	-	2,127	(2,127)
Amounts withheld or retained by company for account of others	131	-	131
Remittances and items not allocated	107,547	-	107,547
Provision for reinsurance	1,003,000	896,842	106,158
Payable to parent, subsidiaries and affiliates	-	22,159,798	(22,159,798)
Payable for securities	88,156	-	88,156
Payable for securities lending	-	1,166,402	(1,166,402)
Aggregate write-ins for liabilities	-	131	(131)
Total Liabilities	<u>95,937,853</u>	<u>121,538,284</u>	<u>(25,600,431)</u>
Common capital stock	3,525,000	3,525,000	0
Gross paid in and contributed surplus	7,577,528	7,577,528	0
Unassigned funds (surplus)	<u>242,474,838</u>	<u>193,331,319</u>	<u>49,143,519</u>
Total Capital and Surplus	<u>253,577,366</u>	<u>204,433,847</u>	<u>49,143,519</u>
Total Liabilities, Surplus and Other Funds	<u>\$349,515,219</u>	<u>\$325,972,131</u>	<u>\$23,543,088</u>

**APPALACHIAN INSURANCE COMPANY**  
**Statement of Income**  
**Year Ended December 31, 2022**

**UNDERWRITING INCOME**

Premiums earned	<u>\$104,754,212</u>
Losses incurred	52,729,263
Loss adjustment expenses incurred	2,688,115
Other underwriting expenses incurred	<u>27,543,092</u>
Total underwriting deductions	<u>82,960,470</u>
Net underwriting gain (loss)	<u>21,793,742</u>

**INVESTMENT INCOME**

Net investment income earned	6,457,033
Net realized capital gains (losses) less capital gains tax	<u>(237,491)</u>
Net investment gain (loss)	<u>6,219,542</u>

**OTHER INCOME**

Net gain (loss) from agents' balances or premium balances charged off	0
Aggregate write-ins for miscellaneous income	<u>0</u>
Total other income	<u>0</u>
Net income before dividends to policyholders, after capital gains tax and before all other federal and foreign income taxes	28,013,284
Dividends to policyholders	<u>0</u>
Net income after dividends to policyholders, after capital gains tax and before all other federal and foreign income taxes	28,013,284
Federal and foreign income taxes incurred	<u>5,884,715</u>
Net income	<u><u>\$22,128,569</u></u>

**APPALACHIAN INSURANCE COMPANY**  
**Reconciliation of Capital and Surplus**  
**December 31, 2017 to December 31, 2022**

Capital and Surplus, December 31, 2017			\$204,433,847
	<u>Gains</u>	<u>Losses</u>	
Net income	49,400,470		
Change in net unrealized capital gains or (losses) less capital gains tax		71,168	
Change in net deferred income tax	51,297		
Change in nonadmitted assets		130,922	
Change in provision for reinsurance		106,158	
	<hr/>	<hr/>	
Total gains and losses	49,451,767	308,248	
	<hr/>	<hr/>	
Net change in capital and surplus for the period			<hr/> 49,143,519 <hr/>
Capital and Surplus, December 31, 2022			<hr/> \$253,577,366 <hr/>



**APPALACHIAN INSURANCE COMPANY**  
**Analysis of Examination Adjustments**  
**December 31, 2022**

The examination of Appalachian, performed as of December 31, 2022, did not disclose any material misstatements to the financial statements contained in its 2022 Annual Statement filing. Accordingly, the amounts reported by Appalachian have been accepted for purposes of this report.

## COMMENTS ON FINANCIAL STATEMENTS

### Bonds

\$7,718,945,617

The above amount is the net admitted value of bonds owned by the FM Global Group and reflects the combined amount reported in the 2022 Annual Statements.

All of the bonds owned at year-end 2022 are held in accordance with custodial agreements with third parties. Approximately 0.22% of the combined bond portfolio, which amounts to \$16,894,520 is held in the form of special deposits with various states.

Approximately ninety-one percent (91%) of all bonds in the combined portfolio at December 31, 2022, were rated as Class 1 and Class 2 based upon evaluation methods established by the National Association of Insurance Commissioners, Securities Valuation Office. Class 1 and Class 2 securities are considered the “highest quality” and “high quality,” respectively.

The aggregate book/adjusted carrying value of bonds owned by the FM Global Group at December 31, 2022, represents 25.9% of their combined total admitted assets. The book value, fair value, actual cost and par value of each insurer’s bond portfolio at December 31, 2022, are as follows:

<b>Insurer</b>	<b>Book/Adjusted Carrying Value</b>	<b>Fair Value</b>	<b>Actual Cost</b>	<b>Par Value</b>
Factory Mutual Insurance Company	\$5,797,022,400	\$5,551,801,157	\$6,101,628,773	\$5,223,870,578
Affiliated FM Insurance Company	1,644,818,022	1,534,161,453	1,677,716,913	1,572,809,632
Appalachian Insurance Company	277,105,195	244,129,621	277,397,303	278,449,486
<b>Total</b>	<b>\$7,718,945,617</b>	<b>\$7,330,092,231</b>	<b>\$8,056,742,989</b>	<b>\$7,075,129,696</b>

**Losses and Loss Adjustment Expenses****\$3,712,078,946**

Losses	\$3,462,697,058
Loss Adjustment Expenses	<u>249,381,888</u>
Total	<u>\$3,712,078,946</u>

The reserves for losses and loss adjustment expenses reflected above are the same as that reported by the FM Global Group in the 2022 Combined Annual Statement. The FM Global Group's recorded reserves were reviewed for reasonableness by INS Regulatory Insurance Services, Inc. ("INS"), consulting actuaries for the Rhode Island Insurance Division. INS relied upon the underlying data reported by the Company, which was tested by the examiners without exception. INS' analyses included a review of the actuarial assumptions and methods utilized in determining the reserves, and such tests of actuarial calculations as deemed necessary.

Based upon the review performed by INS, the FM Global Group's recorded reserves were found to be calculated in accordance with commonly accepted reserving methods and are based on appropriate actuarial factors given the risk exposures under the policy provisions. INS also concluded that the reported reserves make reasonable provision for all unpaid loss and loss adjustment expense obligations of the FM Global Group, in the aggregate, under the terms of its policies and agreements.

INS' review was performed in accordance with the NAIC's *Risk-Focused Surveillance Framework* and was focused on those areas which generate the most risk to the FM Global Group.

### **SUBSEQUENT EVENTS**

A review of financial information, the Companies' records, and the minutes to the Board of Directors' meetings and its various committees for the period subsequent to the examination period was performed to ascertain whether any subsequent events have occurred which would have a material impact on the Companies' operations or financial statements. In addition, an inquiry was made of the Companies' management regarding subsequent events. Based upon our review, there were no significant events occurring subsequent to December 31, 2022.

## CONCLUSION

We have applied verification procedures to the data and information contained in this report using sampling techniques and other examination procedures as deemed appropriate. While sampling and other examination procedures do not give complete assurance that all errors and irregularities will be detected, had any been detected during the course of this examination, such errors and/or irregularities would have been disclosed in this report. Other than what has been noted in the body of this report, we were not informed of, and did not become aware of any errors or irregularities that could have a material effect on the financial condition of the Companies as presented in this report.

Participating in the examination with the undersigned were various staff insurance examiners from the Rhode Island Insurance Division and INS Regulatory Insurance Services, Inc. In addition, acknowledgment is made of INS Regulatory Insurance Services, Inc., and its related companies, INS Consultants, Inc., and INS Services, Inc., for the services rendered to assist with the examination by providing actuaries and information technology specialists.

Respectfully submitted,



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Kelly M. Willison, CPA, CFE, CFE (Fraud)  
Insurance Examiner-In-Charge  
INS Regulatory Insurance Services, Inc., on behalf of  
Rhode Island Insurance Division



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John Tudino Jr., CFE, CIE, CFSA  
Chief Insurance Examiner  
Rhode Island Insurance Division