

As filed with the Securities and Exchange Commission on November 10, 2022

Registration No.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

Form S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

American Axle & Manufacturing, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation of organization)

38-3138388
(I.R.S. employer
Identification No.)

**One Dauch Drive
Detroit, Michigan 48211
(313) 758-2000**

(Address including zip code, and telephone number, including
area code, of registrant's principal executive offices)

American Axle & Manufacturing Holdings, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

38-3161171
(I.R.S. employer
Identification No.)

**One Dauch Drive
Detroit, Michigan 48211
(313) 758-2000**

(Address including zip code, and telephone number, including
area code, of registrant's principal executive offices)

SEE TABLE OF ADDITIONAL REGISTRANTS

David E. Barnes
American Axle & Manufacturing, Inc.
One Dauch Drive
Detroit, Michigan 48211
(313) 758-2000

(Name, address, including zip code, and telephone number, including
area code, of agent for service for the registrants)

Copies to:
Richard B. Alsop, Esq.
Erika Kent, Esq.
Shearman & Sterling LLP
599 Lexington Avenue
New York, New York 10022
(212) 848-4000

**Approximate date of commencement of proposed sale to the public:
From time to time after the effective date of this Registration Statement.**

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

TABLE OF ADDITIONAL REGISTRANTS

Exact Name of Registrant as Specified in Its Charter ⁽¹⁾	State or Other Jurisdiction of Incorporation or Organization	Primary Standard Industrial Classification Code Number	I.R.S. Employee Identification Number
AAM International Holdings, Inc.	Delaware	3714	38-3439761
Auburn Hills Manufacturing, Inc.	Delaware	3714	26-3005324
Oxford Forge, Inc.	Delaware	3714	83-0500168
MSP Industries Corporation	Michigan	3714	38-2382767
Colfor Manufacturing, Inc.	Delaware	3714	34-1834325
AccuGear, Inc.	Delaware	3714	26-3788013
Metaldyne Performance Group, Inc.	Delaware	3714	47-1420222
Metaldyne M&A Bluffton, LLC	Delaware	3714	27-0951678
Metaldyne Powertrain Components, Inc.	Delaware	3714	27-0951786
Metaldyne Sintered Ridgway, LLC	Delaware	3714	27-0951522
Metaldyne SinterForged Products, LLC	Delaware	3714	27-0951460
Punchcraft Machining and Tooling, LLC	Delaware	3714	27-1056645
HHI FormTech, LLC	Delaware	3714	27-0616933
Jernberg Industries, LLC	Delaware	3714	41-2184354
Impact Forge Group, LLC	Delaware	3714	20-5095432
ASP HHI Holdings, Inc.	Delaware	3714	46-0950155
MD Investors Corporation	Delaware	3714	80-0439981
AAM Powder Metal Components, Inc.	Ohio	3714	34-0680655
ASP Grede Intermediate Holdings LLC	Delaware	3714	46-5236694
AAM Casting Corp.	Delaware	3714	83-4672130
Tekfor, Inc.	Delaware	3714	56-2178178

(1) The address of the principal executive offices of all of the registrants is One Dauch Drive, Detroit, Michigan 48211 and the telephone number is (313) 758-2000.

PROSPECTUS



**AMERICAN AXLE & MANUFACTURING, INC.
AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.**

**Debt Securities
Guarantees
Warrants to Purchase Debt Securities
Warrants to Purchase Common Stock
Common Stock
Preferred Stock**

We will provide the specific terms of these securities in supplements or term sheets to this prospectus and whether an offer will be made by us, a selling security holder or both. You should read this prospectus, the prospectus supplements and term sheets carefully before you invest.

We will not use this prospectus to confirm sales of any securities unless it is attached to a prospectus supplement or a term sheet.

American Axle & Manufacturing Holdings, Inc.'s common stock is listed on the New York Stock Exchange under the symbol "AXL."

Investments in our securities involve risks. See "Risk Factors" beginning on page [1](#) of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

THE DATE OF THIS PROSPECTUS IS NOVEMBER 10, 2022.

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You should rely only on the information contained or incorporated by reference in this prospectus and in any accompanying prospectus supplement. No one has been authorized to provide you with different information.

The securities are not being offered in any jurisdiction where the offer is not permitted.

You should not assume that the information contained in or incorporated by reference in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of the documents.

RISK FACTORS

Your investment in the securities involves certain risks. In consultation with your own financial and legal advisers, you should carefully consider whether an investment in the securities is suitable for you. The securities are not an appropriate investment for you if you do not understand the terms of the securities or financial matters generally. Risks relating to the securities will be set forth in the relevant prospectus supplement for the offering of such securities. In addition, certain factors that may adversely affect the business of AAM Inc. (as defined below) or Holdings (as defined below) are discussed in our periodic reports referred to in “Where You Can Find More Information,” below. [For example, Holdings’ Annual Report on Form 10-K for the fiscal year ended December 31, 2021](#), contains a discussion of significant risks that could be relevant to an investment in the securities. You should not purchase the securities described in this prospectus unless you understand and know you can bear all of the investment risks involved.

WHERE YOU CAN FIND MORE INFORMATION

We are required to comply with the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and, in accordance with those requirements, we file combined reports, proxy statements and other information with the Securities and Exchange Commission (the “SEC”). Unless the context otherwise requires, the terms “the Company,” “we,” “us,” “our” and “AAM” refer to collectively (i) American Axle & Manufacturing, Inc., or AAM Inc., a Delaware corporation, and its direct and indirect subsidiaries, (ii) American Axle & Manufacturing Holdings, Inc., or Holdings, a Delaware corporation, and the direct parent corporation of AAM Inc. and (iii) Metaldyne Performance Group Inc., or MPG, a Delaware corporation and a wholly owned subsidiary of Holdings and its direct and indirect subsidiaries. Holdings has no material operations or assets other than its ownership of 100% of the issued and outstanding common stock of AAM Inc. and MPG.

The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding companies like ours that file with the SEC electronically. The documents can be found by searching the EDGAR archives at the SEC’s website. Our SEC filings and other information about us may also be obtained from our website at www.aam.com, although information on our website does not constitute a part of this prospectus. Material that we have filed may also be inspected at the library of the New York Stock Exchange, 11 Wall Street, New York, New York 10005.

The SEC allows us to “incorporate by reference” the information we file with them, which means that we can disclose important information to you by referring you to those documents that are considered part of this prospectus. Later information that we file will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than information furnished under Items 2.02 or 7.01 of Form 8-K) (i) after the date of the filing of this Registration Statement and (ii) until the offering of the particular securities covered by a prospectus supplement or term sheet has been completed.

We are incorporating by reference into this prospectus the following documents filed with the SEC (excluding any portions of such documents that have been “furnished” but not “filed” for purposes of the Exchange Act):

- [Holdings’ Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed with the SEC on February 11, 2022.](#)
- [Holdings’ proxy statement on Schedule 14A filed with the SEC on March 24, 2022](#) (to the extent incorporated into Part III of Holdings’ [Annual Report on Form 10-K for the fiscal year ended December 31, 2021](#)).
- Holdings’ Quarterly Reports on Form 10-Q for the quarters ended March 31, 2022, June 30, 2022 and September 30, 2022 filed with the SEC on [May 6, 2022](#), [August 5, 2022](#) and [November 4, 2022](#), respectively.
- [Holdings’ Current Reports on Form 8-K dated March 14, 2022](#) (as amended by [Holdings’ Current Report on Form 8-K/A dated March 14, 2022](#)) and [May 9, 2022](#).
- The description of our common stock contained in [Exhibit 4.14](#) to Holdings’ Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed with the SEC on February 11, 2022, and any amendment or report filed with the SEC for the purpose of updating the description.

The documents incorporated by reference in this prospectus are available from us upon request. We will provide a copy of any and all of the information that is incorporated by reference in this prospectus to any person, without charge, upon written or oral request. Requests for such copies should be directed to the following:

American Axle & Manufacturing Holdings, Inc.
Attention: Investor Relations
One Dauch Drive
Detroit, Michigan 48211-1198
Telephone Number: (313) 758-2404

Except as provided above, no other information, including, but not limited to, information on our websites is incorporated by reference in this prospectus.

AMERICAN AXLE & MANUFACTURING

As a leading global tier 1 automotive and mobility supplier, AAM designs, engineers and manufactures Driveline and Metal Forming technologies to support electric, hybrid, and internal combustion vehicles. Headquartered in Detroit, with nearly 85 facilities in 18 countries, AAM is bringing the future faster for a safer and more sustainable tomorrow.

We are a primary supplier of driveline components to General Motors Company (“GM”) for its full-size rear-wheel drive light trucks, sport utility vehicles (“SUVs”), and crossover vehicles manufactured in North America, supplying a significant portion of GM’s rear axle and four-wheel drive and all-wheel drive axle requirements for these vehicle platforms. We also supply GM with various products from our Metal Forming segment.

We also supply driveline system products to Stellantis N.V. (“Stellantis”) for programs including the heavy-duty Ram full-size pickup trucks and its derivatives, the AWD Chrysler Pacifica and the AWD Jeep Cherokee. In addition, we sell various products to Stellantis from our Metal Forming segment.

We are also a supplier to Ford Motor Company (“Ford”) for driveline system products on certain vehicle programs including the Ford Bronco Sport, Ford Edge, Ford Escape and Lincoln Nautilus, and we sell various products to Ford from our Metal Forming segment.

USE OF PROCEEDS

Except as may be described otherwise in a prospectus supplement or term sheet, we will add the net proceeds from the sale of the securities under this prospectus to our general funds and will use them for working capital and other general corporate purposes, which may include, among other things, reducing or refinancing indebtedness or funding acquisitions.

PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC utilizing a “shelf” registration process. Under this shelf process, any combination of the following securities may be sold in one or more offerings:

- debt securities (“debt securities”), which may be either senior (the “senior securities”) or subordinated (the “subordinated securities”), unsecured (“unsecured debt securities”) or secured (“secured debt securities”) guaranteed (“guarantees of the debt securities”) by Holdings and/or certain subsidiaries which may include those listed on the “Table of Additional Registrants” above;
- warrants to purchase debt securities (“debt warrants”);
- shares of the common stock of Holdings (“common stock”);
- shares of Holdings’ preferred stock (“preferred stock”); or
- warrants to purchase common stock of Holdings (“common stock warrants,” and the shares underlying such common stock warrants, the “warrant shares”).

The terms of the securities will be determined at the time of applicable offering.

We will refer to the debt securities, debt warrants, common stock warrants, warrant shares, the guarantees of the debt securities, common stock and preferred stock, or any combination of those securities, proposed to be sold under this prospectus and the applicable prospectus supplement or term sheet as the “offered securities.” The offered securities, together with any debt securities, common stock and preferred stock issuable upon exercise of debt warrants, common stock warrants, warrant shares or conversion or exchange of other offered securities, as applicable, will be referred to as the “securities.”

You should rely only on the information contained or incorporated by reference in this prospectus or prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus, applicable prospectus supplement, or any documents incorporated by reference is accurate only as of the date on the front cover of the applicable document. Our business, financial condition, results of operations and prospects may have changed since then.

Our principal executive offices are located at One Dauch Drive, Detroit, Michigan 48211, telephone number: (313) 758-2000.

PROSPECTUS SUPPLEMENT OR TERM SHEET

This prospectus provides you with a general description of the debt securities, warrants to purchase debt securities, common stock warrants, warrant shares, common stock and preferred stock we may offer. Each time we sell securities, we will provide a prospectus supplement or term sheet that will contain specific information about the terms of that offering and whether securities are being offered by us, a selling security holder or both. The prospectus supplement or term sheet to be attached to the front of this prospectus will describe: the terms of the securities offered, any initial public offering price, the price paid to us for the securities, the net proceeds to us, the manner of distribution and any underwriting compensation and the other specific material terms related to the offering of these securities. The prospectus supplement or term sheet may also add to, update or change information contained in this prospectus, and accordingly, to the extent inconsistent, information in this prospectus is superseded by the information in the prospectus supplement or term sheet. You should read both this prospectus and any prospectus supplement or term sheet together with the additional information described under the heading “Where You Can Find More Information.”

For more detail on the terms of the securities, you should read the exhibits filed with or incorporated by reference in this Registration Statement.

FORWARD-LOOKING STATEMENTS

Certain statements contained in this prospectus, or any accompanying prospectus supplement and the documents incorporated herein or therein by reference are forward-looking in nature, such as statements concerning our expectations, beliefs, plans, objectives, goals, strategies, and future events or performance. Such statements are “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1995 and relate to trends and events that may affect our future financial position and operating results. The terms such as “will,” “may,” “could,” “would,” “plan,” “believe,” “expect,” “anticipate,” “intend,” “project,” “target,” and similar words or expressions, as well as statements in future tense, are intended to identify forward-looking statements.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved. Forward-looking statements are based on information available at the time those statements are made and/or management’s good faith belief as of that time with respect to future events and are subject to risks and may differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- significant disruptions in production, sales and/or supply as a result of public health crises, including pandemic or epidemic illness such as COVID-19, or otherwise;
- global economic conditions, including the impact of inflation or slower growth in the markets in which we operate;
- reduced purchases of our products by GM, Stellantis, Ford or other customers;
- our ability to respond to changes in technology, increased competition or pricing pressures;
- our ability to develop and produce new products that reflect market demand;
- lower-than-anticipated market acceptance of new or existing products;
- our ability to attract new customers and programs for new products;
- reduced demand for our customers’ products (particularly light trucks and SUVs produced by GM, Stellantis and Ford);
- risks inherent in our global operations (including tariffs and the potential consequences thereof to us, our suppliers, and our customers and their suppliers, adverse changes in trade agreements, such as the United States-Mexico-Canada Agreement, immigration policies, political stability or geopolitical conflicts, taxes and other law changes, potential disruptions of production and supply, and currency rate fluctuations);
- supply shortages, such as the semiconductor shortage that the automotive industry is currently experiencing and the availability of natural gas or other fuel and utility sources in certain regions, labor shortages, including increased labor costs, or price increases in raw material and/or freight, utilities or other operating supplies for us or our customers as a result of pandemics, geopolitical conflicts, natural disasters or otherwise;
- a significant disruption in operations at one or more of our key manufacturing facilities;
- negative or unexpected tax consequences;
- risks related to a failure of our information technology systems and networks, and risks associated with current and emerging technology threats and damage from computer viruses, unauthorized access, cyber attacks and other similar disruptions;
- cost or availability of financing for working capital, capital expenditures, research and development (the “R&D”) or other general corporate purposes including acquisitions, as well as our ability to comply with financial covenants;
- our customers’ and suppliers’ availability of financing for working capital, capital expenditures, R&D or other general corporate purposes;

- an impairment of our goodwill, other intangible assets, or long-lived assets if our business or market conditions indicate that the carrying values of those assets exceed their fair values;
- liabilities arising from warranty claims, product recall or field actions, product liability and legal proceedings to which we are or may become a party, or the impact of product recall or field actions on our customers;
- our ability or our customers' and suppliers' ability to successfully launch new product programs on a timely basis;
- risks of environmental issues, including impacts of climate-related events, that could result in unforeseen issues or costs at our facilities, or risks of noncompliance with environmental laws and regulations, including reputational damage;
- our ability to maintain satisfactory labor relations and avoid work stoppages;
- our suppliers', our customers' and their suppliers' ability to maintain satisfactory labor relations and avoid work stoppages;
- our ability to consummate and successfully integrate acquisitions and joint ventures;
- our ability to achieve the level of cost reductions required to sustain global cost competitiveness;
- our ability to realize the expected revenues from our new and incremental business backlog;
- price volatility in, or reduced availability of, fuel;
- our ability to protect our intellectual property and successfully defend against assertions made against us;
- adverse changes in laws, government regulations or market conditions affecting our products or our customers' products;
- our ability or our customers' and suppliers' ability to comply with regulatory requirements and the potential costs of such compliance;
- changes in liabilities arising from pension and other postretirement benefit obligations;
- our ability to attract and retain qualified personnel in key positions and functions; and
- other unanticipated events and conditions that may hinder our ability to compete.

It is not possible to foresee or identify all such factors and we make no commitment to update any forward-looking statement or to disclose any facts, events or circumstances after the date hereof that may affect the accuracy of any forward-looking statement.

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities in one or more distinct series. This section summarizes the material terms of the debt securities that are common to all series. Most of the financial terms and other specific material terms of any series of debt securities that we offer will be described in a prospectus supplement or term sheet to be attached to the front of this prospectus. Furthermore, since the terms of specific debt securities may differ from the general information we have provided below, you should rely on information in the prospectus supplement or term sheet that contradicts different information below.

As required by federal law for all debt securities of companies that are publicly offered, the debt securities are governed by a document called an “indenture.” An indenture is a contract between us and a financial institution acting as trustee on your behalf. Unless otherwise indicated in a prospectus supplement, the trustee will be U.S. Bank Trust Company, National Association. The trustee has two main roles. First, the trustee can enforce your rights against us if we default. There are some limitations on the extent to which the trustee acts on your behalf, described in the sixth paragraph under “Events of Default.” Second, the trustee performs certain administrative duties for us.

The term “trustee” refers to the senior trustee or the subordinated trustee, as appropriate. We will refer to the indenture that governs the debt securities, as amended from time to time, as the “Indenture.” The Indenture is subject to and governed by the Trust Indenture Act of 1939, as amended (the “TIA”).

The following summary does not purport to be complete, and is subject to, and is qualified in its entirety by reference to, all of the provisions of the debt securities and the Indenture. We urge you to read the Indenture and the form of the debt securities, which you may obtain from us upon request. As used in this description, all references to “AAM Inc.,” “our company,” the “issuer,” “we,” “us” or “our” mean American Axle & Manufacturing, Inc., excluding, unless otherwise expressly stated or the context otherwise requires, its subsidiaries, including those acting as Subsidiary Guarantors (as defined below), and all references to “Holdings” mean American Axle & Manufacturing Holdings, Inc., our parent corporation, excluding, unless otherwise expressly stated or the context otherwise requires, its subsidiaries. Holdings has no material operations or assets other than its ownership of 100% of the issued and outstanding common stock of American Axle & Manufacturing, Inc., and Metaldyne Performance Group Inc. (“MPG”). The Subsidiary Guarantors are MPG and certain of AAM Inc.’s and MPG’s current and future subsidiaries (“Subsidiary Guarantors”).

General

The debt securities will be AAM Inc.’s obligations which may be secured or unsecured. The senior unsecured securities will rank equally with all of our other unsecured and unsubordinated indebtedness and will be guaranteed by Holdings and/or any Subsidiary Guarantors, if applicable. The Holdings guarantee and any Subsidiary guarantees will rank equally with all of their other unsecured and unsubordinated indebtedness. Terms of secured debt securities and the related Holdings guarantee and any Subsidiary guarantees will be more fully described in a prospectus supplement. The subordinated securities will be subordinated in right of payment to the prior payment in full of AAM Inc.’s senior indebtedness as more fully described in a prospectus supplement or term sheet. The subordinated debt securities will be guaranteed on a subordinated basis by Holdings, and, if applicable, the Subsidiary Guarantors, as more fully described in a prospectus supplement or term sheet.

The Indenture provides that any debt securities proposed to be sold under this prospectus and the attached prospectus supplement or term sheet, including the guarantee by Holdings and any Subsidiary guarantees (“offered debt securities”) and any debt securities issuable upon the exercise of debt warrants or upon conversion or exchange of other offered securities (“underlying debt securities”), as well as other unsecured debt securities, may be issued under the Indenture in one or more series.

You should read the prospectus supplement or term sheet for the material terms of the offered debt securities and any underlying debt securities, including the following:

- The title of the debt securities and whether the debt securities will be senior securities or subordinated securities.

- The total principal amount of the debt securities and any limit on the total principal amount of debt securities of the series.
- If not the principal amount of the debt securities, the portion of the principal amount payable upon acceleration of the maturity of the debt securities or how this portion will be determined.
- The date or dates, or how the date or dates will be determined or extended, when the principal of the debt securities will be payable.
- The interest rate or rates, which may be fixed or variable, that the debt securities will bear, if any, or how the rate or rates will be determined, the date or dates from which any interest will accrue or how the date or dates will be determined, the interest payment dates, any record dates for these payments and the basis upon which interest will be calculated if other than that of a 360-day year of twelve 30-day months.
- Any optional redemption provisions.
- Whether debt securities are secured and the terms of such security interests.
- Whether debt securities are not to be guaranteed by Holdings and any modifications to such guarantee.
- Whether debt securities are guaranteed by any Subsidiary Guarantors and any deletions from, modifications to, or additions to such guarantees, Events of Default (as defined under the heading “Events of Default” below) or covenants with respect to such guarantees.
- Any sinking fund or other provisions that would obligate us to repurchase or otherwise redeem the debt securities.
- If other than registered debt securities, the form in which we will issue the debt securities; whether we will have the option of issuing debt securities in “certificated” form; whether we will have the option of issuing certificated debt securities in bearer form if we issue the securities outside the United States to non-U.S. persons; any restrictions on the offer, sale or delivery of bearer securities and the terms, if any, upon which bearer securities of the series may be exchanged for registered securities of the series and vice versa (if permitted by applicable laws and regulations).
- If other than U.S. dollars, the currency or currencies in which the debt securities are denominated and/or payable.
- Whether the amount of payments of principal, premium or interest, if any, on the debt securities will be determined with reference to an index, formula or other method (which could be based on one or more currencies, commodities, equity indices or other indices) and how these amounts will be determined.
- The place or places, if any, other than or in addition to The City of New York, of payment, transfer, conversion and/or exchange of the debt securities.
- If other than denominations of \$2,000 or any integral multiple of \$1,000 thereafter in the case of registered securities issued in certificated form and \$5,000 in the case of bearer securities, the denominations in which the offered debt securities will be issued.
- The applicability of the provisions of the Indenture under “Defeasance” and any provisions in modification of, in addition to or in lieu of any of these provisions.
- Whether and under what circumstances we will pay additional amounts in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem the debt securities rather than pay the additional amounts (and the terms of this option).
- Whether the securities are subordinated and the terms of such subordination.
- Any provisions granting special rights to the holders of the debt securities upon the occurrence of specified events.
- Any changes or additions to the Events of Default or covenants contained in the Indenture.
- Whether the debt securities will be convertible into or exchangeable for any other securities and the applicable terms and conditions.

- Any other material terms of the debt securities and guarantees.

For purposes of this prospectus, any reference to the payment of principal or premium or interest, if any, on the debt securities will include additional amounts if required by the terms of the debt securities.

The Indenture does not limit the amount of debt securities that may be issued thereunder from time to time. Debt securities issued under the Indenture, when a single trustee is acting for all debt securities issued under the Indenture, are called the “indenture securities.” The Indenture also provides that there may be more than one trustee thereunder, each with respect to one or more different series of indenture securities. See “Resignation of Trustee” below. At a time when two or more trustees are acting under the Indenture, each with respect to only certain series, the term “indenture securities” means the one or more series of debt securities with respect to which each respective trustee is acting. In the event that there is more than one trustee under the Indenture, the powers and trust obligations of each trustee described in this prospectus will extend only to the one or more series of indenture securities for which it is trustee. If two or more trustees are acting under the Indenture, then the indenture securities for which each trustee is acting would be treated as if issued under separate indentures.

The Indenture does not contain any provisions that give you protection in the event we issue a large amount of debt or we are acquired by another entity.

We refer you to the prospectus supplement or term sheet for information with respect to any deletions from, modifications of or additions to the Events of Default or our covenants that are described below, including any addition of a covenant or other provision providing event risk or similar protection.

We have the ability to issue indenture securities with terms different from those of indenture securities previously issued and, without the consent of the holders thereof, to reopen a previous issue of a series of indenture securities and issue additional indenture securities of that series unless the reopening was restricted when that series was created.

Unless otherwise specified in the applicable prospectus supplement or term sheet, the debt securities will be denominated in U.S. dollars and all payments on the debt securities will be made in U.S. dollars.

Payment of the purchase price of the debt securities must be made in immediately available funds.

As used in this prospectus, “Business Day” means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which commercial banks are authorized or required by law, regulation or executive order to close in The City of New York; *provided, however*, that, with respect to foreign currency debt securities, the day is also not a day on which commercial banks are authorized or required by law, regulation or executive order to close in the Principal Financial Center (as defined below) of the country issuing the specified currency (or, if the specified currency is the euro, the day is also a day on which the Trans-European Automated Real Time Gross Settlement Express Transfer (“TARGET”) System is operating, which we refer to as a “TARGET Business Day”).

“Principal Financial Center” means (i) the capital city of the country issuing the specified currency or (ii) the following cities in the case of the following currencies:

Currency	Principal Financial Center
U.S. dollars	The City of New York
Australian dollars	Sydney
Canadian dollars	Toronto
New Zealand dollars	Auckland
South African rand	Johannesburg
Swiss francs	Zurich

The authorized denominations of debt securities denominated in U.S. dollars will be \$2,000 and integral multiples of \$1,000 thereafter. The authorized denominations of foreign currency debt securities will be set forth in the applicable prospectus supplement or term sheet.

Optional Redemption, Repayment and Repurchase

If specified in a prospectus supplement or term sheet, we may redeem the debt securities at our option, in whole at any time or in part from time to time, at a redemption price as set forth in the applicable prospectus supplement or term sheet.

We will mail notice of any redemption at least 30 days, but not more than 60 days, before the date of redemption to each holder of the debt securities to be redeemed. If less than all of the debt securities are to be redeemed at any time, the trustee will select debt securities to be redeemed on a pro rata basis or by any other method the trustee deems fair and appropriate. Unless we default in payment of the redemption price, on and after the date of redemption, interest will cease to accrue on the debt securities or portions thereof called for redemption.

Regardless of anything in this prospectus to the contrary, if a debt security is an OID Note (as defined below) (other than an Indexed Note), the amount payable in the event of redemption or repayment prior to its stated maturity will be the amortized face amount on the redemption or repayment date, as the case may be. The amortized face amount of an OID Note will be equal to (i) the issue price specified in the applicable prospectus supplement or term sheet plus (ii) that portion of the difference between the issue price and the principal amount of the OID Note that has accrued at the yield to maturity described in the prospectus supplement or term sheet (computed in accordance with generally accepted U.S. bond yield computation principles) by the redemption or repayment date. However, in no case will the amortized face amount of an OID Note exceed its principal amount.

We may at any time purchase debt securities at any price in the open market or otherwise. We may hold, resell or surrender for cancellation any debt securities that we purchase.

Conversion and Exchange

If any debt securities are convertible into or exchangeable for other securities, the prospectus supplement or term sheet will explain the terms and conditions of the conversion or exchange, including the conversion price or exchange ratio (or the calculation method), the conversion or exchange period (or how the period will be determined), if conversion or exchange will be mandatory or at the option of the holder or us, provisions for adjusting the conversion price or the exchange ratio and provisions affecting conversion or exchange in the event of the redemption of the underlying debt securities. These terms may also include provisions under which the number or amount of other securities to be received by the holders of the debt securities upon conversion or exchange would be calculated according to the market price of the other securities as of a time stated in the prospectus supplement or term sheet.

Issuance of Securities in Registered Form

We may issue the debt securities in registered form, in which case we will issue them in book-entry form only. Debt securities issued in book-entry form will be represented by global securities. We also will have the option of issuing debt securities in non-registered form as bearer securities if we issue the securities outside the United States to non-U.S. persons. In that case, the prospectus supplement or term sheet will set forth the mechanics for holding the bearer securities, including the procedures for receiving payments, for exchanging the bearer securities for registered securities of the same series, and for receiving notices. The prospectus supplement or term sheet will also describe the requirements with respect to our maintenance of offices or agencies outside the United States and the applicable U.S. federal tax law requirements.

Book-Entry Holders. We will issue registered debt securities in book-entry form only, unless we specify otherwise in the applicable prospectus supplement or term sheet. This means debt securities will be represented by one or more global securities registered in the name of a depository that will hold them on behalf of financial institutions that participate in the depository's book-entry system. These participating institutions, in turn, hold beneficial interests in the debt securities held by the depository or its nominee. These institutions may hold these interests on behalf of themselves or customers.

Under the Indenture, only the person in whose name a debt security is registered is recognized as the holder of that debt security. Consequently, for debt securities issued in book-entry form, we will recognize only the depository as the holder of the debt securities and we will make all payments on the debt securities

to the depository. The depository will then pass along the payments it receives to its participants, which, in turn, will pass the payments along to their customers who are the beneficial owners. The depository and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the debt securities.

As a result, investors will not own debt securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depository's book-entry system or holds an interest through a participant. As long as the debt securities are represented by one or more global securities, investors will be indirect holders, and not holders of the debt securities.

Street Name Holders. In the future, we may issue debt securities in certificated form or terminate a global security. In these cases, investors may choose to hold their debt securities in their own names or in "street name." Debt securities held in street name are registered in the name of a bank, broker or other financial institution chosen by the investor, and the investor would hold a beneficial interest in those debt securities through the account he or she maintains at that institution.

For debt securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the debt securities are registered as the holders of those debt securities and we will make all payments on those debt securities to them. These institutions will pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold debt securities in street name will be indirect holders, and not holders, of the debt securities.

Legal Holders. Our obligations, as well as the obligations of the applicable trustee and those of any third parties employed by us or the applicable trustee, run only to the legal holders of the debt securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a debt security or has no choice because we are issuing the debt securities only in book-entry form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depository participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, if we want to obtain the approval of the holders for any purpose (for example, to amend the Indenture or to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the Indenture), we would seek the approval only from the holders, and not the indirect holders, of the debt securities. Whether and how the holders contact the indirect holders is up to the holders.

When we refer to you, we mean those who invest in the debt securities being offered by this prospectus, the prospectus supplement or term sheet whether they are the holders or only indirect holders of those debt securities. When we refer to your debt securities, we mean the debt securities in which you hold a direct or indirect interest.

Special Considerations for Indirect Holders. If you hold debt securities through a bank, broker or other financial institution, either in book-entry form or in street name, we urge you to check with that institution to find out:

- how it handles securities payments and notices,
- whether it imposes fees or charges,
- how it would handle a request for the holders' consent, if ever required,
- whether and how you can instruct it to send you debt securities registered in your own name so you can be a holder, if that is permitted in the future for a particular series of debt securities,
- how it would exercise rights under the debt securities if there were a default or other event triggering the need for holders to act to protect their interests, and
- if the debt securities are in book-entry form, how the depository's rules and procedures will affect these matters.

Interest and Interest Rates

General

Each debt security will begin to accrue interest from the date it is originally issued. The related prospectus supplement or term sheet will specify each debt security as a “Fixed Rate Note,” a “Floating Rate Note,” an “Amortizing Note” or an “Indexed Note” and describe the method of determining the interest rate, including any spread and/or spread multiplier. For an Indexed Note, the related prospectus supplement or term sheet also will describe the method for the calculation and payment of principal and interest. The prospectus supplement or term sheet for a Floating Rate Note or Indexed Note may also specify a maximum and a minimum interest rate.

A debt security may be issued as a Fixed Rate Note or a Floating Rate Note or as a Note that combines fixed and floating rate terms.

Interest rates offered with respect to debt securities may differ depending upon, among other things, the aggregate principal amount of debt securities purchased in any single transaction. Debt securities with similar variable terms but different interest rates, as well as debt securities with different variable terms, may be offered concurrently to different investors. Interest rates or formulas and other terms of debt securities are subject to change from time to time, but no such change will affect any debt security already issued or as to which an offer to purchase has been accepted.

Interest on the debt securities denominated in U.S. dollars will be paid by check mailed on an Interest Payment Date (as defined below) other than a Maturity Date (as defined below) to the persons entitled thereto to the addresses of such holders as they appear in the security register or, at our option, by wire transfer to a bank account maintained by the holder. The principal of, premium, if any, and interest on debt securities denominated in U.S. dollars, together with interest accrued and unpaid thereon, due on the Maturity Date will be paid in immediately available funds upon surrender of such debt securities at the corporate trust office of the trustee in The City of New York, or, at our option, by wire transfer of immediately available funds to an account with a bank designated at least 15 calendar days prior to the Maturity Date by the applicable registered holder, provided the particular bank has appropriate facilities to receive these payments and the particular debt security is presented and surrendered at the office or agency maintained by us for this purpose in the Borough of Manhattan, The City of New York, in time for the trustee to make these payments in accordance with its normal procedures.

Fixed Rate Notes

The prospectus supplement or term sheet for Fixed Rate Notes will describe a fixed interest rate payable semiannually in arrears on the dates specified in such term sheet or prospectus supplement (each, with respect to Fixed Rate Notes, an “Interest Payment Date”). Interest on Fixed Rate Notes will be computed on the basis of a 360-day year of twelve 30-day months. If the stated maturity date, any redemption date or any repayment date (together referred to as the “Maturity Date”) or an Interest Payment Date for any Fixed Rate Note is not a Business Day, principal of, premium, if any, and interest on that Note will be paid on the next Business Day, and no interest will accrue from and after the Maturity Date or Interest Payment Date. Interest on Fixed Rate Notes will be paid to holders of record as of each Regular Record Date. A “Regular Record Date” will be the fifteenth day (whether or not a Business Day) next preceding the applicable Interest Payment Date.

Each interest payment on a Fixed Rate Note will include interest accrued from, and including, the issue date or the last Interest Payment Date, as the case may be, to but excluding the applicable Interest Payment Date or the Maturity Date, as the case may be.

Original Issue Discount Notes

We may issue original issue discount debt securities (including zero coupon debt securities) (“OID Notes”), which are debt securities issued at a discount from the principal amount payable on the Maturity Date. There may not be any periodic interest payments on OID Notes. For OID Notes, interest normally accrues during the life of the OID Note and is paid on the Maturity Date. Upon a redemption, repayment

or acceleration of the maturity of an OID Note, the amount payable will be determined as set forth under “— Optional Redemption, Repayment and Repurchase.” This amount normally is less than the amount payable on the stated maturity date.

Amortizing Notes

We may issue amortizing debt securities, which are Fixed Rate Notes for which combined principal and interest payments are made in installments over the life of each debt securities (“Amortizing Notes”). Payments on Amortizing Notes are applied first to interest due and then to the reduction of the unpaid principal amount. The related prospectus supplement or term sheet for an Amortizing Note will include a table setting forth repayment information.

Floating Rate Notes

Each Floating Rate Note will have an interest rate basis or formula. As described in the related prospectus supplement or term sheet, that basis or formula may be based on:

- the CD Rate;
- the Commercial Paper Rate;
- EURIBOR;
- the Federal Funds Rate;
- the Prime Rate;
- the Treasury Rate;
- the CMT Rate;
- the Eleventh District Cost of Funds Rate; or
- another specified interest rate basis or formula.

The prospectus supplement or term sheet will also indicate any spread and/or spread multiplier, which would be applied to the interest rate formula to determine the interest rate. Any Floating Rate Note may have a maximum or minimum interest rate limitation. In addition to any maximum interest rate limitation, the interest rate on the Floating Rate Notes will in no event be higher than the maximum rate permitted by New York law, as the same may be modified by United States law for general application. Floating Rate Notes will have a minimum interest rate of 0.0%.

We will appoint a calculation agent to calculate interest rates on the Floating Rate Notes. Unless we identify a different party in the prospectus supplement or term sheet, the paying agent will be the calculation agent for each Note.

Unless otherwise specified in a prospectus supplement or term sheet, the “Calculation Date,” if applicable, relating to an Interest Determination Date (as described below under “— Date Interest Rate is Determined”) will be the earlier of (i) the tenth calendar day after such Interest Determination Date or, if such day is not a Business Day, the next succeeding Business Day, or (ii) the Business Day immediately preceding the relevant Interest Payment Date or the Maturity Date, as the case may be.

Upon the request of the beneficial holder of any Floating Rate Note, the calculation agent will provide the interest rate then in effect and, if different, when available, the interest rate that will become effective on the next Interest Reset Date for the Floating Rate Note.

Change of Interest Rate. The interest rate on each Floating Rate Note may be reset daily, weekly, monthly, quarterly, semiannually, annually or on some other specified basis (each, an “Interest Reset Date”). Unless the applicable prospectus supplement or term sheet provides otherwise, the Interest Reset Date will be:

- for Notes with interest that resets daily, each Business Day;

- for Notes (other than Treasury Rate Notes) with interest that resets weekly, Wednesday of each week;
- for Treasury Rate Notes with interest that resets weekly, Tuesday of each week;
- for Notes with interest that resets monthly, the third Wednesday of each month;
- for Notes with interest that resets quarterly, the third Wednesday of March, June, September and December of each year;
- for Notes with interest that resets semiannually, the third Wednesday of each of the two months of each year indicated in the applicable prospectus supplement or term sheet; and
- for Notes with interest that resets annually, the third Wednesday of the month of each year indicated in the applicable prospectus supplement or term sheet.

The related prospectus supplement or term sheet will describe the initial interest rate or interest rate formula on each Note. That rate is effective until the following Interest Reset Date. Thereafter, the interest rate will be the rate determined on each Interest Determination Date. Each time a new interest rate is determined, it becomes effective on the following Interest Reset Date. If any Interest Reset Date is not a Business Day, then the Interest Reset Date is postponed to the next Business Day, except, in the case of EURIBOR Notes, if the next Business Day is in the next calendar month, the Interest Reset Date is the immediately preceding Business Day.

Date Interest Rate Is Determined. The Interest Determination Date for all CD and CMT Rate Notes is the second Business Day before the Interest Reset Date.

The Interest Determination Date for Treasury Rate Notes will be the day of the week in which the Interest Reset Date falls on which Treasury bills of the Index Maturity are normally auctioned. Treasury bills are usually sold at auction on Monday of each week, unless that day is a legal holiday, in which case the auction is usually held on Tuesday. Sometimes, the auction is held on the preceding Friday. If an auction is held on the preceding Friday, that day will be the Interest Determination Date relating to the Interest Reset Date occurring in the next week.

The Interest Determination Date for all Commercial Paper, Federal Funds and Prime Rate Notes will be the first Business Day preceding the Interest Reset Date.

The Interest Determination Date for EURIBOR Notes will be the second TARGET Business Day immediately preceding the applicable Interest Reset Date.

The Interest Determination Date for an Eleventh District Cost of Funds Rate Note is the last Business Day of the month immediately preceding the applicable Interest Reset Date in which the Federal Home Loan Bank of San Francisco published the applicable rate.

The Interest Determination Date relating to a Floating Rate Note with an interest rate that is determined by reference to two or more interest rate bases will be the most recent Business Day which is at least two Business Days before the applicable Interest Reset Date for each interest rate for the applicable Floating Rate Note on which each interest rate basis is determinable.

Payment of Interest. Unless the applicable prospectus supplement or term sheet provides otherwise, the interest will be paid as follows:

- for Notes with interest that resets daily, weekly or monthly, on the third Wednesday of each month;
- for Notes with interest payable quarterly, on the third Wednesday of March, June, September, and December of each year;
- for Notes with interest payable semiannually, on the third Wednesday of each of the two months specified in the applicable prospectus supplement or term sheet;
- for Notes with interest payable annually, on the third Wednesday of the month specified in the applicable prospectus supplement or term sheet (each of the above, with respect to Floating Rate Notes, an “Interest Payment Date”); and

- at maturity, redemption or repayment.

Each interest payment on a Floating Rate Note will include interest accrued from, and including, the issue date or the last Interest Payment Date, as the case may be, to but excluding the applicable Interest Payment Date or the Maturity Date, as the case may be.

Interest on a Floating Rate Note will be payable beginning on the first Interest Payment Date after its issue date to holders of record at the close of business on each Regular Record Date, which is the fifteenth day (whether or not a Business Day) next preceding the applicable Interest Payment Date, unless the issue date falls after a Regular Record Date and on or prior to the related Interest Payment Date, in which case payment will be made to holders of record at the close of business on the Regular Record Date next preceding the second Interest Payment Date following the issue date. If an Interest Payment Date (but not the Maturity Date) is not a Business Day, then the Interest Payment Date will be postponed to the next Business Day, except in the case of EURIBOR Notes, if the next Business Day is in the next calendar month, the Interest Payment Date will be the immediately preceding Business Day. If the Maturity Date of any Floating Rate Note is not a Business Day, principal of, premium, if any, and interest on that Note will be paid on the next Business Day, and no interest will accrue from and after the Maturity Date.

Accrued interest on a Floating Rate Note is calculated by multiplying the principal amount of a Note by an accrued interest factor. The accrued interest factor is the sum of the interest factors calculated for each day in the period for which accrued interest is being calculated. The interest factor for each day is computed by dividing the interest rate in effect on that day by (1) the actual number of days in the year, in the case of Treasury Rate Notes or CMT Rate Notes, or (2) 360, in the case of other Floating Rate Notes. The interest factor for Floating Rate Notes for which the interest rate is calculated with reference to two or more interest rate bases will be calculated in each period in the same manner as if only one of the applicable interest rate bases applied. All percentages resulting from any calculation are rounded to the nearest one hundred-thousandth of a percentage point, with five one-millionths of a percentage point rounded upward. For example, 9.876545% (or .09876545) will be rounded to 9.87655% (or .0987655). Dollar amounts used in the calculation are rounded to the nearest cent (with one-half cent being rounded upward).

CD Rate Notes. The “CD Rate” for any Interest Determination Date is the rate on that date for negotiable U.S. dollar certificates of deposit having the Index Maturity described in the related prospectus supplement or term sheet, as published in H.15 prior to 4:15 P.M., New York City time, on the Calculation Date, for that Interest Determination Date under the heading “CDs (secondary market).” The “Index Maturity” is the period to maturity of the instrument or obligation with respect to which the related interest rate basis or formula will be calculated.

The following procedures will be followed if the CD Rate cannot be determined as described above:

- If the above rate is not published in H.15 by 4:15 P.M., New York City time, on the Calculation Date, the CD Rate will be the rate on that Interest Determination Date for negotiable United States dollar certificates of deposit of the Index Maturity described in the prospectus supplement or term sheet as published in H.15, or such other recognized electronic source used for the purpose of displaying such rate, under the caption “CDs (secondary market).”
- If that rate is not published in H.15 or another recognized electronic source by 4:15 P.M., New York City time, on the Calculation Date, then the calculation agent will determine the CD Rate to be the average of the secondary market offered rates as of 10:00 A.M., New York City time, on that Interest Determination Date, quoted by three leading nonbank dealers of negotiable U.S. dollar certificates of deposit in New York City (which may include an agent or its affiliates) for negotiable U.S. dollar certificates of deposit of major United States money-center banks with a remaining maturity closest to the Index Maturity in an amount that is representative for a single transaction in the market at that time described in the prospectus supplement or term sheet. The calculation agent will select the three dealers referred to above.
- If fewer than three dealers are quoting as mentioned above, the CD Rate will remain the CD Rate then in effect on that Interest Determination Date.

“H.15” means the daily statistical release designated as such, or any successor publication, published by the Board of Governors of the Federal Reserve System.

Commercial Paper Rate Notes. The “Commercial Paper Rate” for any Interest Determination Date is the Money Market Yield of the rate on that date for commercial paper having the Index Maturity described in the related prospectus supplement or term sheet, as published in H.15 prior to 4:15 P.M., New York City time, on the Calculation Date for that Interest Determination Date under the heading “Commercial Paper — Nonfinancial.”

The following procedures will be followed if the Commercial Paper Rate cannot be determined as described above:

- If the above rate is not published in H.15 by 4:15 P.M., New York City time, on the Calculation Date, the Commercial Paper Rate will be the Money Market Yield of the rate on that Interest Determination Date for commercial paper having the Index Maturity described in the prospectus supplement or term sheet, as published in H.15, or such other recognized electronic source used for the purpose of displaying such rate, under the caption “Commercial Paper — Nonfinancial.”
- If that rate is not published in H.15 or another recognized electronic source by 4:15 P.M., New York City time, on the Calculation Date, then the calculation agent will determine the Commercial Paper Rate to be the Money Market Yield of the average of the offered rates of three leading dealers of U.S. dollar commercial paper in New York City (which may include an agent or its affiliates) as of 11:00 A.M., New York City time, on that Interest Determination Date for commercial paper having the Index Maturity described in the prospectus supplement or term sheet placed for an industrial issuer whose bond rating is “Aa,” or the equivalent, from a nationally recognized statistical rating organization. The calculation agent will select the three dealers referred to above.
- If fewer than three dealers selected by the calculation agent are quoting as mentioned above, the Commercial Paper Rate will remain the Commercial Paper Rate then in effect on that Interest Determination Date.

“Money Market Yield” means a yield (expressed as a percentage) calculated in accordance with the following formula:

$$\text{Money Market Yield} = \frac{D \times 360}{360 - (D \times M)} \times 100$$

where “D” refers to the applicable per annum rate for commercial paper quoted on a bank discount basis and expressed as a decimal, and “M” refers to the actual number of days in the reset period for which interest is being calculated.

EURIBOR Notes. Unless otherwise specified in the applicable prospectus supplement or term sheet, the “EURIBOR” for any Interest Determination Date is the offered rate for deposits in euro having the Index Maturity specified in the applicable pricing supplement or term sheet, beginning on the second TARGET Business Day after such EURIBOR Interest Determination Date, as that rate appears on Reuters Page EURIBOR 01 as of 11:00 A.M., Brussels time, on such EURIBOR Interest Determination Date.

The following procedure will be followed if EURIBOR cannot be determined as described above:

- EURIBOR will be determined on the basis of the rates, at approximately 11:00 A.M., Brussels time, on such EURIBOR Interest Determination Date, at which deposits of the following kind are offered to prime banks in the euro-zone interbank market by the principal euro-zone office of each of four major banks in that market selected by the calculation agent: euro deposits having such EURIBOR Index Maturity, beginning on such EURIBOR Interest Reset Date, and in a representative amount. The calculation agent will request that the principal euro-zone office of each of these banks provide a quotation of its rate. If at least two quotations are provided, EURIBOR for such EURIBOR Interest Determination Date will be the arithmetic mean of the quotations.
- If fewer than two quotations are provided as described above, EURIBOR for such EURIBOR Interest Determination Date will be the arithmetic mean of the rates for loans of the following kind to leading euro-zone banks quoted, at approximately 11:00 A.M., Brussels time on that Interest Determination Date, by three major banks in the euro-zone selected by the calculation agent: loans

of euro having such EURIBOR Index Maturity, beginning on such EURIBOR Interest Reset Date, and in an amount that is representative of a single transaction in euro in that market at the time.

- If fewer than three banks selected by the calculation agent are quoting as described above, EURIBOR for the new interest period will be EURIBOR in effect for the prior interest period. If the initial base rate has been in effect for the prior interest period, however, it will remain in effect for the new interest period.

Federal Funds Rate Notes. The “Federal Funds Rate” will be calculated by reference to either the “Federal Funds (Effective) Rate”, the “Federal Funds Open Rate” or the “Federal Funds Target Rate”, as specified in the applicable pricing supplement or term sheet. The Federal Funds Rate is the rate determined by the calculation agent, with respect to any Interest Determination Date relating to a Floating Rate Note for which the interest rate is determined with reference to the Federal Funds Rate (a “Federal Funds Rate Interest Determination Date”), in accordance with the following provisions:

- If Federal Funds (Effective) Rate is the specified Federal Funds Rate in the applicable pricing supplement or term sheet, the Federal Funds Rate as of the applicable Federal Funds Rate Interest Determination Date shall be the rate with respect to such date for United States dollar federal funds as published in H.15 opposite the caption “Federal funds (effective),” as such rate is displayed on Reuters on page FEDFUNDS1 (or any other page as may replace such page on such service) (“Reuters Page FEDFUNDS1”) under the heading “EFFECT,” or, if such rate is not so published by 4:15 P.M., New York City time, on the calculation date, the rate with respect to such Federal Funds Rate Interest Determination Date for United States dollar federal funds as published in H.15, or such other recognized electronic source used for the purpose of displaying such rate, under the caption “Federal funds (effective).”
- The following procedure will be followed if “Federal Funds (Effective) Rate” is the specified Federal Funds Rate in the applicable pricing supplement or term sheet and such Federal Funds Rate cannot be determined as described above. The Federal Funds Rate with respect to such Federal Funds Rate Interest Determination Date shall be calculated by the calculation agent and will be the arithmetic mean of the rates for the last transaction in overnight United States dollar federal funds arranged by three leading brokers of U.S. dollar federal funds transactions in New York City (which may include the agents or their affiliates) selected by the calculation agent, prior to 9:00 A.M., New York City time, on the Business Day following such Federal Funds Rate Interest Determination Date; provided, however, that if the brokers so selected by the calculation agent are not quoting as mentioned in this sentence, the Federal Funds Rate determined as of such Federal Funds Rate Interest Determination Date will be the Federal Funds Rate in effect on such Federal Funds Rate Interest Determination Date.
- If Federal Funds Open Rate is the specified Federal Funds Rate in the applicable pricing supplement or term sheet, the Federal Funds Rate as of the applicable Federal Funds Rate Interest Determination Date shall be the rate on such date under the heading “Federal Funds” for the relevant Index Maturity and opposite the caption “Open” as such rate is displayed on Reuters on page 5 (or any other page as may replace such page on such service) (“Reuters Page 5”), or, if such rate does not appear on Reuters Page 5 by 4:15 P.M., New York City time, on the calculation date, the Federal Funds Rate for the Federal Funds Rate Interest Determination Date will be the rate for that day displayed on FFPREBON Index page on Bloomberg L.P. (“Bloomberg”), which is the Fed Funds Opening Rate as reported by Prebon Yamane (or a successor) on Bloomberg.
- The following procedure will be followed if “Federal Funds Open Rate” is the specified Federal Funds Rate in the applicable pricing supplement or term sheet and such Federal Funds Rate cannot be determined as described above. The Federal Funds Rate on such Federal Funds Rate Interest Determination Date shall be calculated by the calculation agent and will be the arithmetic mean of the rates for the last transaction in overnight United States dollar federal funds arranged by three leading brokers of United States dollar federal funds transactions in New York City (which may include the agents or their affiliates) selected by the calculation agent prior to 9:00 A.M., New York City time, on such Federal Funds Rate Interest Determination Date; provided, however, that if the brokers so selected by the calculation agent are not quoting as mentioned in this sentence, the Federal

Funds Rate determined as of such Federal Funds Rate Interest Determination Date will be the Federal Funds Rate in effect on such Federal Funds Rate Interest Determination Date.

- If Federal Funds Target Rate is the specified Federal Funds Rate in the applicable pricing supplement or term sheet, the Federal Funds Rate as of the applicable Federal Funds Rate Interest Determination Date shall be the rate on such date as displayed on the FDTR Index page on Bloomberg. If such rate does not appear on the FDTR Index page on Bloomberg by 4:15 P.M., New York City time, on the calculation date, the Federal Funds Rate for such Federal Funds Rate Interest Determination Date will be the rate for that day appearing on Reuters Page USFFTARGET= (or any other page as may replace such page on such service) (“Reuters Page USFFTARGET=”).
- The following procedure will be followed if “Federal Funds Target Rate” is the specified Federal Funds Rate in the applicable pricing supplement or term sheet and such Federal Funds Rate cannot be determined as described above. The Federal Funds Rate on such Federal Funds Rate Interest Determination Date shall be calculated by the calculation agent and will be the arithmetic mean of the rates for the last transaction in overnight United States dollar federal funds arranged by three leading brokers of United States dollar federal funds transactions in New York City (which may include the agents or their affiliates) selected by the calculation agent prior to 9:00 A.M., New York City time, on such Federal Funds Rate Interest Determination Date.

Prime Rate Notes. The “Prime Rate” for any Interest Determination Date is the rate on that date, as published in H.15 by 4:15 P.M., New York City time, on the Calculation Date for that Interest Determination Date under the heading “Bank Prime Loan” or, if not published by 4:15 P.M., New York City time, on the related Calculation Date, the rate on such Interest Determination Date as published in H.15, or such other recognized electronic source used for the purpose of displaying such rate, under the caption “Bank Prime Loan.”

The following procedures will be followed if the Prime Rate cannot be determined as described above:

- If the rate is not published in H.15 or another recognized electronic source by 4:15 P.M., New York City time, on the Calculation Date, then the calculation agent will determine the Prime Rate to be the average of the rates of interest publicly announced by each bank that appears on the Reuters Screen designated as “US PRIME 1 Page” as that bank’s prime rate or base lending rate in effect as of 11:00 A.M., New York City time on that Interest Determination Date.
- If fewer than four rates appear on the Reuters Page US PRIME 1 on the Interest Determination Date, then the Prime Rate will be the average of the prime rates or base lending rates quoted (on the basis of the actual number of days in the year divided by a 360-day year) as of the close of business on the Interest Determination Date by three major banks, which may include an agent or its affiliates, in the City of New York selected by the calculation agent.
- If the banks selected by the calculation agent are not quoting as mentioned above, the Prime Rate will remain the Prime Rate then in effect on the Interest Determination Date.

“Reuters Page US PRIME 1” means the display on Reuters (or any successor service) on the “US PRIME 1 Page” (or such other page as may replace the US PRIME 1 Page on such service) for the purpose of displaying prime rates or base lending rates of major United States banks.

Treasury Rate Notes. The “Treasury Rate” for any Interest Determination Date is the rate from the auction of direct obligations of the United States (“Treasury bills”) having the Index Maturity specified in such pricing supplement or term sheet under the caption “INVEST RATE” on the display on Reuters page USAUCTION10 (or any other page as may replace such page on such service) or page USAUCTION11 (or any other page as may replace such page on such service) or, if not so published at 4:15 P.M., New York City time, on the related calculation date, the bond equivalent yield (as defined below) of the rate for such treasury bills as published in H.15, or such other recognized electronic source used for the purpose of displaying such rate, under the caption “U.S. Government Securities/Treasury Bills/Auction High.” If such rate is not so published in the related H.15 or another recognized source by 4:15 P.M., New York City time, on the related calculation date, the Treasury Rate on such Treasury Rate Interest Determination Date shall be the bond equivalent yield of the auction rate of such Treasury bills as announced by the United States Department of the Treasury. In the event that such auction rate is not so announced by the United States

Department of the Treasury on such calculation date, or if no such auction is held, then the Treasury Rate on such Treasury Rate Interest Determination Date shall be the bond equivalent yield of the rate on such Treasury Rate Interest Determination Date of Treasury bills having the Index Maturity specified in the applicable pricing supplement or term sheet as published in H.15 under the caption “U.S. government securities/treasury bills/secondary market” or, if not yet published by 4:15 P.M., New York City time, on the related calculation date, the rate on such Treasury Rate Interest Determination Date of such treasury bills as published in H.15, or such other recognized electronic source used for the purpose of displaying such rate, under the caption “U.S. government securities/treasury bills (secondary market).” If such rate is not yet published in the H.15 or another recognized electronic source by 4:15 P.M., New York City time, on the related calculation date, then the Treasury Rate on such Treasury Rate Interest Determination Date shall be calculated by the calculation agent and shall be the bond equivalent yield of the arithmetic mean of the secondary market bid rates, as of approximately 3:30 P.M., New York City time, on such Treasury Rate Interest Determination Date, of the three leading primary United States government securities dealers (which may include the agents or their affiliates) selected by the calculation agent, for the issue of Treasury bills with a remaining maturity closest to the Index Maturity specified in the applicable pricing supplement or term sheet; *provided, however*, that if the dealers so selected by the calculation agent are not quoting as mentioned in this sentence, the Treasury Rate determined as of such Treasury Rate Interest Determination Date will be the Treasury Rate in effect on such Treasury Rate Interest Determination Date.

“*bond equivalent yield*” means a yield calculated in accordance with the following formula and expressed as a percentage:

$$\text{bond equivalent yield} = \frac{D \times N}{N - (D \times M)} \times 100$$

where “D” refers to the applicable per annum rate for Treasury bills quoted on a bank discount basis and expressed as a decimal, “N” refers to the number of days in the year, either 365 or 366, as the case may be, and “M” refers to the actual number of days in the interest reset period for which interest is being calculated.

CMT Rate Notes. The “CMT Rate” for any Interest Determination Date is as follows:

- If “Reuters Page FRBCMT” is the specified CMT Reuters Page in the applicable pricing supplement or term sheet, the CMT Rate on the CMT Rate Interest Determination Date shall be a percentage equal to the yield for United States Treasury securities at “constant maturity” having the Index Maturity specified in the applicable pricing supplement or term sheet as set forth in H.15 under the caption “Treasury constant maturities,” as such yield is displayed on Reuters (or any successor service) on page FRBCMT (or any other page as may replace such page on such service) (“Reuters Page FRBCMT”) for such CMT Rate Interest Determination Date.
- If such rate does not appear on Reuters Page FRBCMT, the CMT Rate on such CMT Rate Interest Determination Date shall be a percentage equal to the yield for United States Treasury securities at “constant maturity” having the Index Maturity specified in the applicable pricing supplement or term sheet and for such CMT Rate Interest Determination Date as set forth in H.15 under the caption “Treasury constant maturities.”
- If such rate does not appear in H.15, the CMT Rate on such CMT Rate Interest Determination Date shall be the rate for the period of the Index Maturity specified in the applicable pricing supplement or term sheet as may then be published by either the Federal Reserve Board or the United States Department of the Treasury that the calculation agent determines to be comparable to the rate that would otherwise have been published in H.15.
- If the Federal Reserve Board or the United States Department of the Treasury does not publish a yield on United States Treasury securities at “constant maturity” having the Index Maturity specified in the applicable pricing supplement or term sheet for such CMT Rate Interest Determination Date, the CMT Rate on such CMT Rate Interest Determination Date shall be calculated by the calculation agent and shall be a yield-to-maturity based on the arithmetic mean of the secondary market bid prices at approximately 3:30 P.M., New York City time, on such CMT Rate Interest Determination Date of three leading primary United States government securities dealers in New York City (which may include the agents or their affiliates) (each, a “reference dealer”) selected by the

calculation agent from five such reference dealers selected by the calculation agent and eliminating the highest quotation (or, in the event of equality, one of the highest) and the lowest quotation (or, in the event of equality, one of the lowest) for United States Treasury securities with an original maturity equal to the Index Maturity specified in the applicable pricing supplement or term sheet, a remaining term to maturity no more than one year shorter than such Index Maturity and in a principal amount that is representative for a single transaction in such securities in such market at such time. If fewer than three prices are provided as requested, the CMT Rate on such CMT Rate Interest Determination Date shall be calculated by the calculation agent and shall be a yield-to-maturity based on the arithmetic mean of the secondary market bid prices as of approximately 3:30 P.M., New York City time, on such CMT Rate Interest Determination Date of three reference dealers selected by the calculation agent from five such reference dealers selected by the calculation agent and eliminating the highest quotation (or, in the event of equality, one of the highest) and the lowest quotation (or, in the event of equality, one of the lowest) for United States Treasury securities with an original maturity greater than the Index Maturity specified in the applicable pricing supplement or term sheet, a remaining term to maturity closest to such Index Maturity and in a principal amount that is representative for a single transaction in such securities in such market at such time. If two such United States Treasury securities with an original maturity greater than the Index Maturity specified in the applicable pricing supplement or term sheet have remaining terms to maturity equally close to such Index Maturity, the quotes for the treasury security with the shorter original term to maturity will be used. If fewer than five but more than two such prices are provided as requested, the CMT Rate on such CMT Rate Interest Determination Date shall be calculated by the calculation agent and shall be based on the arithmetic mean of the bid prices obtained and neither the highest nor the lowest of such quotations shall be eliminated; provided, however, that if fewer than three such prices are provided as requested, the CMT Rate determined as of such CMT Rate Interest Determination Date shall be the CMT Rate in effect on such CMT Rate Interest Determination Date.

- If “Reuters Page FEDCMT” is the specified CMT Reuters Page in the applicable pricing supplement or term sheet, the CMT Rate on the CMT Rate Interest Determination Date shall be a percentage equal to the one-week or one-month, as specified in the applicable pricing supplement or term sheet, average yield for United States Treasury securities at “constant maturity” having the Index Maturity specified in the applicable pricing supplement or term sheet as set forth in H.15 opposite the caption “Treasury Constant Maturities,” as such yield is displayed on Reuters on page FEDCMT (or any other page as may replace such page on such service) (“Reuters Page FEDCMT”) for the week or month, as applicable, ended immediately preceding the week or month, as applicable, in which such CMT Rate Interest Determination Date falls.
- If such rate does not appear on Reuters Page FEDCMT, the CMT Rate on such CMT Rate Interest Determination Date shall be a percentage equal to the one-week or one-month, as specified in the applicable pricing supplement or term sheet, average yield for United States Treasury securities at “constant maturity” having the Index Maturity specified in the applicable pricing supplement or term sheet for the week or month, as applicable, preceding such CMT Rate Interest Determination Date as set forth in H.15 opposite the caption “Treasury Constant Maturities.”
- If such rate does not appear in H.15, the CMT Rate on such CMT Rate Interest Determination Date shall be the one-week or one-month, as specified in the applicable pricing supplement or term sheet, average yield for United States Treasury securities at “constant maturity” having the Index Maturity specified in the applicable pricing supplement or term sheet as otherwise announced by the Federal Reserve Bank of New York for the week or month, as applicable, ended immediately preceding the week or month, as applicable, in which such CMT Rate Interest Determination Date falls.
- If the Federal Reserve Bank of New York does not publish a one-week or one-month, as specified in the applicable pricing supplement or term sheet, average yield on United States Treasury securities at “constant maturity” having the Index Maturity specified in the applicable pricing supplement or term sheet for the applicable week or month, the CMT Rate on such CMT Rate Interest Determination Date shall be calculated by the calculation agent and shall be a yield-to-maturity based on the arithmetic mean of the secondary market bid prices at approximately 3:30 P.M., New York City time, on such CMT Rate Interest Determination Date of three reference dealers selected by the

calculation agent from five such reference dealers selected by the calculation agent and eliminating the highest quotation (or, in the event of equality, one of the highest) and the lowest quotation (or, in the event of equality, one of the lowest) for United States Treasury securities with an original maturity equal to the Index Maturity specified in the applicable pricing supplement or term sheet, a remaining term to maturity of no more than one year shorter than such Index Maturity and in a principal amount that is representative for a single transaction in such securities in such market at such time. If fewer than five but more than two such prices are provided as requested, the CMT Rate on such CMT Rate Interest Determination Date shall be the rate on the CMT Rate Interest Determination Date calculated by the calculation agent based on the arithmetic mean of the bid prices obtained and neither the highest nor the lowest of such quotation shall be eliminated. If fewer than three prices are provided as requested, the CMT Rate on such CMT Rate Interest Determination Date shall be calculated by the calculation agent and shall be a yield-to-maturity based on the arithmetic mean of the secondary market bid prices as of approximately 3:30 P.M., New York City time, on such CMT Rate Interest Determination Date of three reference dealers selected by the calculation agent from five such reference dealers selected by the calculation agent and eliminating the highest quotation (or, in the event of equality, one of the highest) and the lowest quotation (or, in the event of equality, one of the lowest) for United States Treasury securities with an original maturity longer than the Index Maturity specified in the applicable pricing supplement or term sheet, a remaining term to maturity closest to such Index Maturity and in a principal amount that is representative for a single transaction in such securities in such market at such time. If two United States Treasury securities with an original maturity greater than the Index Maturity specified in the applicable pricing supplement or term sheet have remaining terms to maturity equally close to such Index Maturity, the quotes for the Treasury security with the shorter original term to maturity will be used. If fewer than five but more than two such prices are provided as requested, the CMT Rate on such CMT Rate Interest Determination Date shall be the rate on the CMT Rate Interest Determination Date calculated by the calculation agent based on the arithmetic mean of the bid prices obtained and neither the highest nor lowest of such quotations shall be eliminated; provided, however, that if fewer than three such prices are provided as requested, the CMT Rate determined as of such CMT Rate Determination Date shall be the CMT Rate in effect on such CMT Rate Interest Determination Date.

Eleventh District Cost of Funds Rate Notes. The “Eleventh District Cost of Funds Rate” for any Interest Determination Date is the rate equal to the monthly weighted average cost of funds for the calendar month preceding the Interest Determination Date as displayed on Reuters Page COFI/ARMS (or any other page as may replace that specified page on that service) as of 11:00 A.M., San Francisco time, on the Calculation Date for that Interest Determination Date under the caption “11th District.”

The following procedures will be used if the Eleventh District Cost of Funds Rate cannot be determined as described above:

- If the rate is not displayed on the relevant page as of 11:00 A.M., San Francisco time, on the Calculation Date, then the Eleventh District Cost of Funds Rate will be the monthly weighted average cost of funds paid by member institutions of the Eleventh Federal Home Loan Bank District, as announced by the Federal Home Loan Bank of San Francisco, as the cost of funds for the calendar month preceding the date of announcement.
- If no announcement was made relating to the calendar month preceding the Interest Determination Date, the Eleventh District Cost of Funds Rate will remain the Eleventh District Cost of Funds Rate then in effect on the Interest Determination Date.

Indexed Notes

We may issue debt securities for which the amount of interest or principal that you will receive will not be known on your date of purchase. Interest or principal payments for these types of debt securities, which we call “Indexed Notes,” are determined by reference to securities, financial or non-financial indices, currencies, commodities, interest rates, or a composite or baskets of any or all of the above. Examples of indexed items that may be used include a published stock index, the common stock price of a publicly traded company, the value of the U.S. dollar versus the Japanese yen, or the price of a barrel of West Texas intermediate crude oil.

If you purchase an Indexed Note, you may receive a principal amount at maturity that is greater than or less than the Note's face amount, and an interest rate that is greater than or less than the interest rate that you would have earned if you had instead purchased a conventional debt security issued by us at the same time with the same maturity. The amount of interest and principal that you will receive will depend on the structure of the Indexed Note and the level of the specified indexed item throughout the term of the Indexed Note and at maturity. Specific information pertaining to the method of determining the interest payments and the principal amount will be described in the prospectus supplement or term sheet, as well as additional risk factors unique to the Indexed Note, certain historical information for the specified indexed item and certain additional United States federal tax considerations.

Renewable Notes

We may issue Renewable Notes ("Renewable Notes") which are debt securities that will automatically renew at their stated maturity date unless the holder of a Renewable Note elects to terminate the automatic extension feature by giving notice in the manner described in the related prospectus supplement or term sheet.

The holder of a Renewable Note must give notice of termination at least 15 but not more than 30 days prior to a Renewal Date. The holder of a Renewable Note may terminate the automatic extension for less than all of its Renewable Notes only if the terms of the Renewable Note specifically permit partial termination. An election to terminate the automatic extension of any portion of the Renewable Note is not revocable and will be binding on the holder of the Renewable Note. If the holder elects to terminate the automatic extension of the maturity of the Note, the holder will become entitled to the principal and interest accrued up to the Renewal Date. The related prospectus supplement or term sheet will identify a stated maturity date beyond which the Maturity Date cannot be renewed.

If a Renewable Note is represented by a Global Security, DTC or its nominee will be the holder of the Note and therefore will be the only entity that can exercise a right to terminate the automatic extension of a Note. In order to ensure that DTC or its nominee will exercise a right to terminate the automatic extension provisions of a particular Renewable Note, the beneficial owner of the Note must instruct the broker or other DTC participant through which it holds an interest in the Note to notify DTC of its desire to terminate the automatic extension of the Note. Different firms have different cut-off times for accepting instructions from their customers and, accordingly, each beneficial owner should consult the broker or other participant through which it holds an interest in a Note to ascertain the cut-off time by which an instruction must be given for delivery of timely notice to DTC or its nominee.

Extendible Notes

We may issue Notes whose stated Maturity Date may be extended at our option (an "Extendible Note") for one or more whole-year periods (each, an "Extension Period"), up to but not beyond a stated maturity date described in the related prospectus supplement or term sheet (but not to exceed 30 years from the date of issue).

We may exercise our option to extend the Extendible Note by notifying the applicable trustee (or any duly appointed paying agent) at least 45 but not more than 60 days prior to the then effective Maturity Date. If we elect to extend the Extendible Note, the trustee (or paying agent) will mail (at least 40 days prior to the Maturity Date) to the registered holder of the Extendible Note a notice (an "Extension Notice") informing the holder of our election, the new Maturity Date and any updated terms. Upon the mailing of the Extension Notice, the maturity of that Extendible Note will be extended automatically as set forth in the Extension Notice.

However, we may, not later than 20 days prior to the Maturity Date of an Extendible Note (or, if that date is not a Business Day, prior to the next Business Day), at our option, establish a higher interest rate, in the case of a Fixed Rate Note, or a higher spread and/or spread multiplier, in the case of a Floating Rate Note, for the Extension Period by mailing or causing the applicable trustee (or paying agent) to mail notice of such higher interest rate or higher spread and/or spread multiplier to the holder of the Note. The notice will be irrevocable.

If we elect to extend the maturity of an Extendible Note, the holder of the Note will have the option to instead elect repayment of the Note by us on the then effective Maturity Date. In order for an Extendible Note to be so repaid on the Maturity Date, we must receive, at least 15 days but not more than 30 days prior to the Maturity Date:

- (1) the Extendible Note with the form “Option to Elect Repayment” on the reverse of the Note duly completed; or
- (2) a facsimile transmission, telex or letter from a member of a national securities exchange or the Financial Industry Regulatory Authority (the “FINRA”) or a commercial bank or trust company in the United States setting forth the name of the holder of the Extendible Note, the principal amount of the Note, the principal amount of the Note to be repaid, the certificate number or a description of the tenor and terms of the Note, a statement that the option to elect repayment is being exercised thereby and a guarantee that the Note be repaid, together with the duly completed form entitled “Option to Elect Repayment” on the reverse of the Note, will be received by the applicable trustee (or paying agent) not later than the fifth Business Day after the date of the facsimile transmission, telex or letter; provided, however; that the facsimile transmission, telex or letter will only be effective if the Note and form duly completed are received by the applicable trustee (or paying agent) by that fifth Business Day. The option may be exercised by the holder of an Extendible Note for less than the aggregate principal amount of the Note then outstanding if the principal amount of the Note remaining outstanding after repayment is an authorized denomination.

If an Extendible Note is represented by a Global Security, DTC or its nominee will be the holder of that Note and therefore will be the only entity that can exercise a right to repayment. To ensure that DTC or its nominee timely exercises a right to repayment with respect to a particular Extendible Note, the beneficial owner of that Note must instruct the broker or other participant through which it holds an interest in the Note to notify DTC of its desire to exercise a right of repayment. Different firms have different cut-off times for accepting instructions from their customers and, accordingly, each beneficial owner should consult the broker or other participant through which it holds an interest in an Extendible Note to determine the cut-off time by which an instruction must be given for timely notice to be delivered to DTC or its nominee.

Global Securities

What Is a Global Security? As noted above, we usually will issue debt securities as registered securities in book-entry form only. A global security represents one or any other number of individual debt securities. Generally, all debt securities represented by the same global securities will have the same terms.

Each debt security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depository. Unless we specify otherwise in the applicable prospectus supplement or term sheet, The Depository Trust Company, New York, New York, known as DTC, will be the depository for all debt securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depository or its nominee, unless special termination situations arise. We describe those situations below under “Special Situations when a Global Security Will Be Terminated.” As a result of these arrangements, the depository, or its nominee, will be the sole registered owner and holder of all debt securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depository or with another institution that has an account with the depository. Thus, an investor whose security is represented by a global security will not be a holder of the debt security, but only an indirect holder of a beneficial interest in the global security.

Special Considerations for Global Securities. As an indirect holder, an investor’s rights relating to a global security will be governed by the account rules of the investor’s financial institution and of the depository, as well as general laws relating to securities transfers. The depository that holds the global security will be considered the holder of the debt securities represented by the global security.

If debt securities are issued only in the form of a global security, an investor should be aware of the following:

- An investor cannot cause the debt securities to be registered in his or her name, and cannot obtain certificates for his or her interest in the debt securities, except in the special situations we describe below.
- An investor will be an indirect holder and must look to his or her own bank or broker for payments on the debt securities and protection of his or her legal rights relating to the debt securities, as we describe under “Issuance of Securities in Registered Form” above.
- An investor may not be able to sell interests in the debt securities to some insurance companies and other institutions that are required by law to own their securities in non-book-entry form.
- An investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the debt securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective.
- The depository’s policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor’s interest in a global security. We and the trustee have no responsibility for any aspect of the depository’s actions or for its records of ownership interests in a global security. We and the trustee also do not supervise the depository in any way.
- If we redeem less than all the debt securities of a particular series being redeemed, DTC’s practice is to determine by lot the amount to be redeemed from each of its participants holding that series.
- An investor is required to give notice of exercise of any option to elect repayment of its debt securities, through its participant, to the applicable trustee and to deliver the related debt securities by causing its participant to transfer its interest in those debt securities, on DTC’s records, to the applicable trustee.
- DTC requires that those who purchase and sell interests in a global security deposited in its book-entry system use immediately available funds. Your broker or bank may also require you to use immediately available funds when purchasing or selling interests in a global security.
- Financial institutions that participate in the depository’s book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the debt securities. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated. In a few special situations described below, a global security will be terminated and interests in it will be exchanged for certificates in non-book-entry form (certificated securities). After that exchange, the choice of whether to hold the certificated debt securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in a global security transferred on termination to their own names, so that they will be holders. We have described the rights of holders and street name investors under “Issuance of Securities in Registered Form” above.

The special situations for termination of a global security are as follows:

- if the depository notifies us that it is unwilling, unable or no longer qualified to continue as depository for that global security, and we do not appoint another institution to act as depository within 60 days,
- if we notify the trustee that we wish to terminate that global security, or
- if an event of default has occurred with regard to the debt securities represented by that global security and has not been cured or waived; we discuss defaults later under “Events of Default.”

The prospectus supplement or term sheet may list situations for terminating a global security that would apply only to the particular series of debt securities covered by the prospectus supplement or term sheet. If a global security is terminated, only the depository, and not we or the applicable trustee, is responsible

for deciding the names of the institutions in whose names the debt securities represented by the global security will be registered and, therefore, who will be the holders of those debt securities.

Payment and Paying Agents

We will pay interest to the person listed in the trustee's records as the owner of the debt security at the close of business on a particular day in advance of each due date for interest, even if that person no longer owns the debt security on the interest due date. That day, usually about two weeks in advance of the interest due date, is called the "record date." Because we will pay all the interest for an interest period to the holders on the record date, holders buying and selling debt securities must work out between themselves the appropriate purchase price. The most common manner is to adjust the sales price of the debt securities to prorate interest fairly between buyer and seller based on their respective ownership periods within the particular interest period. This prorated interest amount is called "accrued interest."

Payments on Global Securities. We will make payments on a global security in accordance with the applicable policies of the depository as in effect from time to time. Under those policies, we will make payments directly to the depository, or its nominee, and not to any indirect holders who own beneficial interests in the global security. An indirect holder's right to those payments will be governed by the rules and practices of the depository and its participants, as described under "What Is a Global Security?"

Payments on Certificated Securities. We will make payments on a certificated debt security as follows. We will pay interest that is due on an interest payment date by check mailed on the interest payment date to the holder at his or her address shown on the trustee's records as of the close of business on the regular record date. We will make all payments of principal and premium, if any, by check at the office of the applicable trustee in New York, New York and/or at other offices that may be specified in the prospectus supplement or term sheet or in a notice to holders, against surrender of the debt security.

Alternatively, if the holder asks us to do so, we will pay any amount that becomes due on the debt security by wire transfer of immediately available funds to an account at a bank in New York City, on the due date. To request payment by wire, the holder must give the applicable trustee or other paying agent appropriate transfer instructions at least 15 Business Days before the requested wire payment is due. In the case of any interest payment due on an interest payment date, the instructions must be given by the person who is the holder on the relevant regular record date. Any wire instructions, once properly given, will remain in effect unless and until new instructions are given in the manner described above.

Payment When Offices Are Closed. If any payment is due on a debt security on a day that is not a Business Day, we will make the payment on the next day that is a Business Day. Payments made on the next Business Day in this situation will be treated under the Indenture as if they were made on the original due date, except as otherwise indicated in the attached prospectus supplement or term sheet. Such payment will not result in a default under any debt security or the Indenture, and no interest will accrue on the payment amount from the original due date to the next day that is a Business Day.

Material Covenants

Consolidation, Merger, Sale or Conveyance. The Indenture provides that AAM Inc. or Holdings may not consolidate with or merge into any other entity or convey, transfer or lease their properties and assets substantially as an entirety to any entity, unless:

- the successor or transferee entity, if other than AAM Inc. or Holdings, as the case may be, is a corporation organized and existing under the laws of the United States, any state thereof or the District of Columbia and expressly assumes by a supplemental indenture executed and delivered to the trustee, in form reasonably satisfactory to the trustee, the due and punctual payment of the principal of, any premium on and any interest on, all the outstanding debt securities and the performance of every covenant and obligation in the Indenture to be performed or observed by AAM Inc. or Holdings, as the case may be;
- immediately after giving effect to the transaction, no Event of Default, as defined in the Indenture, and no event which, after notice or lapse of time or both, would become an Event of Default, has happened and is continuing; and

- AAM Inc. or Holdings, as the case may be, has delivered to the trustee an officers' certificate and an opinion of counsel, each in the form required by the Indenture and stating that such consolidation, merger, conveyance, transfer or lease and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture comply with the foregoing provisions relating to such transaction.

In case of any such consolidation, merger, conveyance or transfer, the successor entity will succeed to and be substituted for AAM Inc. or Holdings, as the case may be, as obligor or guarantor on the debt securities, as the case may be, with the same effect as if it had been named in the Indenture as AAM Inc. or Holdings, as the case may be.

Limitation on Liens. AAM Inc. and Holdings will not, and will not permit any Restricted Subsidiary to, create, incur, issue, assume or guarantee any indebtedness for money borrowed ("Debt") secured by a Mortgage upon any Operating Property, or upon shares of capital stock or Debt issued by any Restricted Subsidiary and owned by AAM Inc. or Holdings or any Restricted Subsidiary, whether owned at the date of the Indenture or thereafter acquired, without effectively providing concurrently that the debt securities of each series then outstanding under the Indenture are secured equally and ratably with or, at our option, prior to such Debt so long as such Debt shall be so secured.

The foregoing restriction shall not apply to, and there shall be excluded from Debt in any computation under such restriction, Debt secured by:

- (1) Mortgages on any property existing at the time of the acquisition thereof;
- (2) Mortgages on property of a corporation existing at the time such corporation is merged into or consolidated with our company or Holdings or a Restricted Subsidiary or at the time of a sale, lease or other disposition of the properties of such corporation (or a division thereof) as an entirety or substantially as an entirety to us, Holdings or a Restricted Subsidiary, *provided* that any such Mortgage does not extend to any property owned by us, Holdings or any Restricted Subsidiary immediately prior to such merger, consolidation, sale, lease or disposition;
- (3) Mortgages on property of a corporation existing at the time such corporation becomes a Restricted Subsidiary;
- (4) Mortgages in favor of our company, Holdings or a Restricted Subsidiary;
- (5) Mortgages to secure all or part of the cost of acquisition, construction, development or improvement of the underlying property, or to secure debt incurred to provide funds for any such purpose, *provided* that the commitment of the creditor to extend the credit secured by any such Mortgage shall have been obtained no later than 360 days after the later of (a) the completion of the acquisition, construction, development or improvement of such property or (b) the placing in operation of such property;
- (6) Mortgages in favor of the United States of America or any state thereof, or any department, agency or instrumentality or political subdivision thereof, to secure partial, progress, advance or other payments; and
- (7) Mortgages existing on the date of the Indenture or any extension, renewal, replacement or refunding of any Debt secured by a Mortgage existing on the date of the Indenture or referred to in clauses (1) to (3) or (5), *provided* that any such extension, renewal, replacement or refunding of such Debt shall be created within 360 days of repaying the Debt secured by the Mortgage referred to in clauses (1) to (3) or (5) and the principal amount of the Debt secured thereby and not otherwise authorized by clauses (1) to (3) or (5) shall not exceed the principal amount of Debt, plus any premium or fee payable in connection with any such extension, renewal, replacement or refunding, so secured at the time of such extension, renewal, replacement or refunding.

Notwithstanding the restrictions described above, AAM Inc., Holdings and any Restricted Subsidiaries may create, incur, issue, assume or guarantee Debt secured by Mortgages without equally and ratably securing the debt securities of each series then outstanding if, at the time of such creation, incurrence, issuance,

assumption or guarantee, after giving effect thereto and to the retirement of any Debt which is concurrently being retired, the aggregate amount of all such Debt secured by Mortgages which would otherwise be subject to such restrictions (other than any Debt secured by Mortgages permitted as described in clauses (1) through (7) of the immediately preceding paragraph) plus all Attributable Debt of AAM Inc., Holdings and the Restricted Subsidiaries in respect of Sale and Leaseback Transactions with respect to Operating Properties (with the exception of such transactions which are permitted under clauses (1) through (4) of the first sentence of the first paragraph under “— Limitation on Sale and Leaseback Transactions” below) does not exceed 10% of Consolidated Net Tangible Assets.

“*Consolidated Tangible Assets*” means the aggregate of all assets of Holdings (including the value of all existing Sale and Leaseback Transactions and any assets resulting from finance leases or the capitalization of other long-term lease obligations in accordance with GAAP) appearing on the most recent available consolidated balance sheet of Holdings at their net book values, after deducting related depreciation, applicable allowances and other properly deductible items, and after deducting all goodwill, trademarks, tradenames, patents, unamortized debt discount and expenses and other like intangibles, all prepared in accordance with GAAP.

“*Consolidated Current Liabilities*” means the aggregate of the current liabilities of Holdings appearing on the most recent available consolidated balance sheet of Holdings, all in accordance with GAAP. In no event shall Consolidated Current Liabilities include any obligation of Holdings or its Subsidiaries issued under a revolving credit or similar agreement if the obligation issued under such agreement matures by its terms within 12 months from the date thereof but by the terms of such agreement such obligation may be renewed or extended or the amount thereof reborrowed or refunded at the option of Holdings, our company or any Subsidiary for a term in excess of 12 months from the date of determination.

“*Consolidated Net Tangible Assets*” means Consolidated Tangible Assets after deduction of Consolidated Current Liabilities.

“*GAAP*” means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession which are in effect on the Issue Date.

“*Mortgage*” means, with respect to any property or assets, any mortgage or deed of trust, pledge, hypothecation, assignment, security interest, lien, encumbrance, or any other security arrangement of any kind or nature whatsoever on or with respect to such property or assets (including any conditional sale or other title retention agreement having substantially the same economic effect as any of the foregoing).

“*Operating Property*” means any real property or equipment located in the United States owned by, or leased to, AAM Inc., Holdings or any Subsidiary that has a market value in excess of 1.0% of Consolidated Net Tangible Assets.

“*Person*” means any individual, corporation, partnership, joint venture, trust, unincorporated organization or government or any agency or political subdivision thereof.

“*Restricted Subsidiary*” means any Subsidiary (excluding AAM Inc.) that owns Operating Property.

“*Sale and Leaseback Transaction*” means any arrangement with any Person providing for the leasing to AAM Inc., Holdings or any Subsidiary of any Operating Property, which Operating Property has been or is to be sold or transferred by AAM Inc., Holdings or such Subsidiary to such Person.

“*Subsidiary*” means any corporation of which at least a majority of the outstanding stock having by the terms thereof ordinary voting power for the election of directors of such corporation (irrespective of whether or not at the time stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time directly or indirectly owned by AAM Inc. or Holdings, or by one or more other Subsidiaries, or by AAM Inc. or Holdings and one or more other Subsidiaries.

Limitation on Sale and Leaseback Transactions. AAM Inc. and Holdings will not, and will not permit any Restricted Subsidiary to, enter into any Sale and Leaseback Transaction with respect to any Operating Property unless:

- (1) the Sale and Leaseback Transaction is solely with our company, Holdings or another Restricted Subsidiary;
- (2) the lease is for a period not in excess of 24 months, including renewals;
- (3) our company, Holdings or such Restricted Subsidiary would (at the time of entering into such arrangement) be entitled as described in clauses (1) through (7) of the second paragraph under the heading “— Limitation on Liens,” without equally and ratably securing the debt securities then outstanding under the Indenture, to create, incur, issue, assume or guarantee Debt secured by a Mortgage on such Operating Property in the amount of the Attributable Debt arising from such Sale and Leaseback Transaction;
- (4) our company, Holdings or such Restricted Subsidiary within 360 days after the sale of such Operating Property in connection with such Sale and Leaseback Transaction is completed, applies an amount equal to the greater of (A) the net proceeds of the sale of such Operating Property or (B) the fair market value of such Operating Property to (i) the retirement of debt securities, other Funded Debt of our company or Holdings ranking on a parity with the debt securities or Funded Debt of a Restricted Subsidiary or (ii) the purchase of Operating Property; or
- (5) the Attributable Debt of our company, Holdings and our Restricted Subsidiaries in respect of such Sale and Leaseback Transaction and all other Sale and Leaseback Transactions entered into after the date of the Indenture (other than any such Sale and Leaseback Transaction as would be permitted as described in clauses (1) through (4) of this sentence), plus the aggregate principal amount of Debt secured by Mortgages on Operating Properties then outstanding (not including any such Debt secured by Mortgages described in clauses (1) through (7) of the second paragraph under the heading “— Limitation on Liens”) which do not equally and ratably secure such outstanding debt securities (or secure such outstanding debt securities on a basis that is prior to other Debt secured thereby), would not exceed 10% of Consolidated Tangible Net Assets.

“Attributable Debt” in respect of any Sale and Leaseback Transaction, means, as of the time of determination, the total obligation (discounted to present value at the rate per annum equal to the discount rate which would be applicable to a capital lease obligation with like term in accordance with GAAP) of the lessee for rental payments (other than amounts required to be paid on account of property taxes, maintenance, repairs, insurance, water rates and other items which do not constitute payments for property rights) during the remaining portion of the initial term of the lease included in such Sale and Leaseback Transaction.

“Funded Debt” means all Debt having a maturity of more than 12 months from the date as of which the determination is made or having a maturity of 12 months or less but by its terms being renewable or extendable beyond 12 months from such date at the option of the borrower, but excluding any such Debt owed to our company, Holdings or a Subsidiary.

Events of Default

An event of default is defined in the Indenture as:

- (a) default for 30 days in payment of any interest on the debt securities when it becomes due and payable;
- (b) default in payment of principal of or any premium on the debt securities at maturity or redemption or repurchase price when the same becomes due and payable;
- (c) default by us or Holdings in the performance of any other covenant contained in the Indenture for the benefit of the debt securities that has not been remedied by the end of a period of 60 days after notice is given as specified in the Indenture;

(d) the guarantee of Holdings ceases to be in full force and effect or is declared null and void or Holdings or any such Subsidiary Guarantor denies that it has any further liability under its guarantee to the note holders, or has given notice to such effect (other than by reason of the termination of the Indenture or the release of such guarantee in accordance with the Indenture), and such condition shall have continued for a period of 30 days after notice is given as specified in the Indenture;

(e) default in the payment of principal when due or resulting in acceleration of other indebtedness of AAM Inc., Holdings or any Significant Subsidiary for borrowed money where the aggregate principal amount with respect to which the default or acceleration has occurred exceeds \$100 million and such acceleration has not been rescinded or annulled or such indebtedness repaid within a period of 30 days after written notice to us by the trustee or to us and the trustee by the holders of at least 25% in principal amount at maturity of the debt securities, *provided* that if any such default is cured, waived, rescinded or annulled, then the event of default by reason thereof would be deemed not to have occurred; and

(f) certain events of bankruptcy, insolvency and reorganization of our company or Holdings.

When we refer to a “Significant Subsidiary,” we mean any Subsidiary that would constitute a “significant subsidiary” within the meaning of Article 1 of Regulation S-X of the Securities Act as in effect on the date of the Indenture.

The Indenture provides that:

- if an event of default described in clause (a), (b), (c), (d) or (e) above has occurred and is continuing, either the trustee or the holders of not less than 25% in aggregate principal amount of the debt securities may declare the principal amount of the debt securities then outstanding, and any accrued and unpaid interest through the date of such declaration, to be due and payable immediately;
- upon certain conditions such declarations may be annulled and past defaults (except for defaults in the payment of principal of, any premium on or interest on, the debt securities and in compliance with certain covenants) may be waived by the holders of a majority in aggregate principal amount of the debt securities then outstanding; and
- if an event of default described in clause (f) occurs and is continuing, then the principal amount of all debt securities issued under the Indenture and then outstanding, together with any accrued interest through the occurrence of such event, shall become and be due and payable immediately, without any declaration or other act by the trustee or any other holder.

Under the Indenture, the trustee must give to the holders of debt securities notice of all uncured defaults known to it with respect to the debt securities within 90 days after such a default occurs (the term default to include the events specified above without notice or grace periods); *provided* that, except in the case of default in the payments of principal of or any premium on, any of the debt securities, the trustee will be protected in withholding such notice if it in good faith determines that the withholding of such notice is in the interests of the holders of the debt securities.

No holder of any debt securities may institute any action under the Indenture unless:

- such holder has given the trustee written notice of a continuing event of default with respect to the debt securities;
- the holders of not less than 25% in aggregate principal amount of the debt securities then outstanding have requested the trustee to institute proceedings in respect of such event of default;
- such holder or holders have offered the trustee such reasonable indemnity as the trustee may require;
- the trustee has failed to institute an action for 60 days thereafter; and
- no inconsistent direction has been given to the trustee during such 60-day period by the holders of a majority in aggregate principal amount of debt securities.

The holders of a majority in aggregate principal amount of the debt securities affected and then outstanding will have the right, subject to certain limitations, to direct the time, method and place of

conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities. The Indenture provides that, if an event of default occurs and is continuing, the trustee, in exercising its rights and powers under the Indenture, will be required to use the degree of care of a prudent man in the conduct of his own affairs. The Indenture further provides that the trustee shall not be required to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties under the Indenture unless it has reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is reasonably assured to it.

We must furnish to the trustee within 120 days after the end of each fiscal year a statement of our company signed by one of the officers of our company to the effect that a review of our activities during such year and our performance under the Indenture and the terms of the debt securities has been made, and, to the knowledge of the signatories based on such review, we have complied with all conditions and covenants of the Indenture or, if we are in default, specifying such default.

Modification of the Indenture

We, the trustee and, if applicable, Holdings and any Subsidiary Guarantors, may, without the consent of the holders of the debt securities issued under the Indenture, enter into supplemental indenture for, among others, one or more of the following purposes:

- to evidence the succession of another corporation to our company, and the assumption by such successor of our obligations under the Indenture and the debt securities;
- to add covenants of our company, or surrender any rights of the company, or add any rights for the benefit of the holders of debt securities;
- to cure any ambiguity, omission, defect or inconsistency in such Indenture; provided that such action does not adversely affect the interests of the holders of any series and any related coupons in any material respect;
- to add any guarantors with respect to the securities of any series;
- to establish the form or terms of any other series of debt securities, including the form or terms of any Subsidiary Guarantor's guarantee of the securities and/or the provisions and procedures relating to securities convertible into or exchangeable for any securities of any Person, including the Company or Holdings;
- to evidence and provide the acceptance of any successor trustee with respect to the debt securities or one or more other series of debt securities or to facilitate the administration of the trusts thereunder by one or more trustees in accordance with such Indenture; and
- to provide any additional events of default.

With certain exceptions, the Indenture, the Holdings guarantee, any Subsidiary guarantee or the rights of the holders of the debt securities may be modified by us and the trustee with the consent of the holders of a majority in aggregate principal amount of the debt securities then outstanding, but no such modification may be made without the consent of the holder of each outstanding debt security affected thereby that would:

- change the maturity of any payment of principal of, or any premium on, any debt securities, or change any place of payment where, or the coin or currency in which, any debt security or any premium is payable, or impair the right to institute suit for the enforcement of any such payment on or after the maturity thereof (or, in the case of redemption, on or after the redemption date);
- reduce the percentage in principal amount of the outstanding debt securities, the consent of whose holders is required for any such modification, or the consent of whose holders is required for any waiver of compliance with certain provisions of the Indenture or certain defaults thereunder and their consequences provided for in the Indenture; or
- modify any of the provisions of certain sections of the Indenture, including the provisions summarized in this paragraph, except to increase any such percentage or to provide that certain other provisions

of the Indenture cannot be modified or waived without the consent of the holder of each outstanding debt securities affected thereby.

Defeasance

The following provisions will be applicable to each series of debt securities unless we state in the applicable prospectus supplement or term sheet that the provisions of covenant defeasance and full defeasance will not be applicable to that series.

Covenant Defeasance. Under current United States federal tax law, we can make the deposit described below and be released from some of the restrictive covenants in the Indenture under which the particular series was issued. This is called “covenant defeasance.” In that event, you would lose the protection of those restrictive covenants but would gain the protection of having money and government securities set aside in trust to repay your debt securities. If you hold subordinated securities, you also would be released from the subordination provisions described in the applicable prospectus supplement or term sheet. In order to achieve covenant defeasance, we must do the following:

- If the debt securities of the particular series are denominated in U.S. dollars, deposit in trust for the benefit of all holders of such debt securities a combination of money and United States government or United States government agency debt securities or bonds that will generate enough cash to make interest, principal and any other payments on the debt securities on their various due dates.
- Deliver to the trustee a legal opinion of our counsel confirming that, under current United States federal income tax law, we may make the above deposit without causing you to be taxed on the debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves at maturity.
- Deliver to the trustee a legal opinion of our counsel stating that the above deposit does not require registration by us under the Investment Company Act of 1940, as amended, and a legal opinion and officers’ certificate stating that all conditions precedent to covenant defeasance have been complied with.

If we accomplish covenant defeasance, you can still look to us for repayment of the debt securities if there were a shortfall in the trust deposit or the trustee is prevented from making payment. In fact, if one of the remaining Events of Default occurred (such as our bankruptcy) and the debt securities became immediately due and payable, there might be a shortfall. Depending on the event causing the default, you may not be able to obtain payment of the shortfall.

Full Defeasance. If there is a change in United States federal tax law, as described below, we can legally release ourselves from all payment and other obligations on the debt securities of a particular series (called “full defeasance”) if we put in place the following other arrangements for you to be repaid:

- If the debt securities of the particular series are denominated in U.S. dollars, we must deposit in trust for the benefit of all holders of such debt securities a combination of money and United States government or United States government agency debt securities or bonds that will generate enough cash to make interest, principal and any other payments on the debt securities on their various due dates.
- We must deliver to the trustee a legal opinion confirming that there has been a change in current United States federal tax law or an Internal Revenue Service ruling that allows us to make the above deposit without causing you to be taxed on the debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves at maturity. Under current United States federal tax law, the deposit and our legal release from the debt securities would be treated as though we paid you your share of the cash and debt securities or bonds at the time the cash and debt securities or bonds were deposited in trust in exchange for your debt securities and you would recognize gain or loss on the debt securities at the time of the deposit.
- We must deliver to the trustee a legal opinion of our counsel stating that the above deposit does not require registration by us under the Investment Company Act of 1940, as amended, and a legal opinion and officers’ certificate stating that all conditions precedent to defeasance have been complied with.

If we ever did accomplish full defeasance, as described above, you would have to rely solely on the trust deposit for repayment of the debt securities. You could not look to us for repayment in the unlikely event of any shortfall. Conversely, the trust deposit would most likely be protected from claims of our lenders and other creditors if we ever became bankrupt or insolvent. If you hold subordinated securities, you would also be released from the subordination provisions described in the applicable prospectus supplement or term sheet.

Discharge of the Indenture

We may satisfy and discharge our obligations under the Indenture by delivering to the trustee for cancellation all outstanding debt securities or by depositing with the trustee or the paying agent after the debt securities have become due and payable, whether at stated maturity, or any redemption date, or otherwise, cash sufficient to pay all of the outstanding debt securities and paying all other sums payable under the Indenture by our company.

Form, Exchange and Transfer of Certificated Registered Securities

If registered debt securities cease to be issued in book-entry form, they will be issued:

- only in fully registered certificated form,
- without interest coupons, and
- unless we indicate otherwise in the prospectus supplement or term sheet, in denominations of \$2,000 and amounts that are multiples of \$1,000.

Holder may exchange their certificated securities for debt securities of smaller denominations or combined into fewer debt securities of larger denominations, as long as the total principal amount is not changed.

Holder may exchange or transfer their certificated securities at the office of their trustee. We have appointed the trustee to act as our agent for registering debt securities in the names of holders transferring debt securities. We may appoint another entity to perform these functions or perform them ourselves.

Holder will not be required to pay a service charge to transfer or exchange their certificated securities, but they may be required to pay any tax or other governmental charge associated with the transfer or exchange. The transfer or exchange will be made only if our transfer agent is satisfied with the holder's proof of legal ownership.

If we have designated additional transfer agents for your debt security, they will be named in your prospectus supplement or term sheet. We may appoint additional transfer agents or cancel the appointment of any particular transfer agent. We may also approve a change in the office through which any transfer agent acts.

If any certificated securities of a particular series are redeemable and we redeem less than all the debt securities of that series, we may block the transfer or exchange of those debt securities during the period beginning 15 days before the day we mail the notice of redemption and ending on the day of that mailing, in order to freeze the list of holders to prepare the mailing. We may also refuse to register transfers or exchanges of any certificated securities selected for redemption, except that we will continue to permit transfers and exchanges of the unredeemed portion of any debt security that will be partially redeemed.

If a registered debt security is issued in book-entry form, only the depository will be entitled to transfer and exchange the debt security as described in this subsection, since it will be the sole holder of the debt security.

Resignation of Trustee

The trustee may resign or be removed with respect to one or more series of indenture securities *provided* that a successor trustee is appointed to act with respect to these series. In the event that two or

more persons are acting as trustee with respect to different series of indenture securities under the Indenture, each of the trustees will be a trustee of a trust separate and apart from the trust administered by any other trustee.

The Trustee Under the Indenture

U.S. Bank Trust Company, National Association is one of a number of banks with which we maintain ordinary banking relationships and from which we may have obtained credit facilities and lines of credit.

Certain Considerations Relating to Foreign Currencies

Debt securities denominated or payable in foreign currencies may entail significant risks. These risks include the possibility of significant fluctuations in the foreign currency markets, the imposition or modification of foreign exchange controls and potential illiquidity in the secondary market. These risks will vary depending upon the currency or currencies involved and will be more fully described in the applicable prospectus supplement or term sheet.

DESCRIPTION OF GUARANTEES

The Guarantees

This section summarizes some of the terms of the guarantees by Holdings and/or any relevant Subsidiary Guarantor. Most of the financial terms and other specific material terms of any guarantees that we offer will be described in a prospectus supplement or term sheet to be attached to the front of this prospectus. Furthermore, since the terms of specific guarantees may differ from the general information we have provided below, you should rely on information in the prospectus supplement or term sheet that contradicts different information below.

Each guarantee by Holdings and/or any Subsidiary Guarantors may:

- be senior obligations of the relevant guarantor in the case of senior debt securities;
- be the unsecured and unsubordinated obligations of the relevant guarantor in the case of senior unsecured debt securities;
- rank equally (or *pari passu*) with all other existing and future unsubordinated and unsecured indebtedness of the relevant guarantor, respectively in the case of senior unsecured debt securities; and
- with respect to any series of debt securities that is designated as subordinated, be junior and subordinated to any guarantee of any senior indebtedness on the same basis as such debt securities are junior and subordinated to any senior indebtedness.

The obligations of each Subsidiary Guarantor under its guarantee will be limited as necessary to prevent that guarantee from constituting a fraudulent conveyance or fraudulent transfer under applicable law.

Not all of our subsidiaries will guarantee the debt securities. In the event of a bankruptcy, liquidation or reorganization of any of these non-guarantor subsidiaries, these non-guarantor subsidiaries will pay holders of their debts and their trade creditors before they will be able to distribute any of their assets to us.

Each guarantee by a Subsidiary Guarantor will provide by its terms that it will be automatically and unconditionally released and discharged in accordance with its terms as more fully described in the applicable prospectus supplement or term sheet.

DESCRIPTION OF DEBT WARRANTS

We may issue (either separately or together with other offered securities) debt warrants to purchase underlying debt securities issued by us (“offered debt warrants”). We will issue the debt warrants under warrant agreements (each a “debt warrant agreement”) to be entered into between us and a bank or trust company, as warrant agent (the “debt warrant agent”), identified in the prospectus supplement or term sheet.

Because this section is a summary, it does not describe every aspect of the debt warrants and the debt warrant agreement. We urge you to read the debt warrant agreement because it, and not this description, defines your rights as a holder of debt warrants. We will file the form of debt warrant agreement with the SEC. See “Where You Can Find More Information” for information on how to obtain a copy of the debt warrant agreement.

General

You should read the prospectus supplement or term sheet for the material terms of the offered debt warrants, including the following:

- The title and aggregate number of the debt warrants.
- The title, rank, aggregate principal amount and terms of the underlying debt securities purchasable upon exercise of the debt warrants.
- The principal amount of underlying debt securities that may be purchased upon exercise of each debt warrant, and the price or the manner of determining the price at which this principal amount may be purchased upon exercise.
- The time or times at which, or the period or periods during which, the debt warrants may be exercised and the expiration date of the debt warrants.
- Any optional redemption terms.
- Whether certificates evidencing the debt warrants will be issued in registered or bearer form and, if registered, where they may be transferred and exchanged.
- Whether the debt warrants are to be issued with any debt securities or any other securities and, if so, the amount and terms of these debt securities or other securities.
- The date, if any, on and after which the debt warrants and these debt securities or other securities will be separately transferable.
- Any other material terms of the debt warrants.

The prospectus supplement or term sheet will also contain a discussion of the United States federal income tax considerations relevant to the offering.

Debt warrant certificates will be exchangeable for new debt warrant certificates of different denominations. No service charge will be imposed for any permitted transfer or exchange of debt warrant certificates, but we may require payment of any tax or other governmental charge payable in connection therewith. Debt warrants may be exercised and exchanged and debt warrants in registered form may be presented for registration of transfer at the corporate trust office of the debt warrant agent or any other office indicated in the prospectus supplement or term sheet.

Exercise of Debt Warrants

Each offered debt warrant will entitle the holder thereof to purchase the amount of underlying debt securities at the exercise price set forth in, or calculable from, the prospectus supplement or term sheet relating to the offered debt warrants. After the close of business on the expiration date, unexercised debt warrants will be void.

Debt warrants may be exercised by payment to the debt warrant agent of the applicable exercise price and by delivery to the debt warrant agent of the related debt warrant certificate, properly completed. Debt

warrants will be deemed to have been exercised upon receipt of the exercise price and the debt warrant certificate or certificates.

Upon receipt of this payment and the properly completed debt warrant certificates, we will, as soon as practicable, deliver the amount of underlying debt securities purchased upon exercise.

If fewer than all of the debt warrants represented by any debt warrant certificate are exercised, a new debt warrant certificate will be issued for the unexercised debt warrants. The holder of a debt warrant will be required to pay any tax or other governmental charge that may be imposed in connection with any transfer involved in the issuance of underlying debt securities purchased upon exercise.

Modifications

There are three types of changes we can make to a debt warrant agreement and the debt warrants issued thereunder.

Changes Requiring Your Approval. First, there are changes that cannot be made to your debt warrants without your specific approval. Those types of changes include modifications and amendments that:

- accelerate the expiration date;
- reduce the number of outstanding debt warrants, the consent of the holders of which is required for a modification or amendment; or
- otherwise materially and adversely affect the rights of the holders of the debt warrants.

Changes Not Requiring Approval. The second type of change does not require any vote by holders of the debt warrants. This type of change is limited to clarifications and other changes that would not materially adversely affect the interests of holders of the debt warrants.

Changes Requiring a Majority Vote. Any other change to the debt warrant agreement and the debt warrants requires a vote in favor by holders of a majority in number of the then outstanding unexercised debt warrants affected thereby. Most changes fall into this category.

No Rights as Holders of Underlying Debt Securities

Before the warrants are exercised, holders of the debt warrants are not entitled to payments of principal, premium or interest, if any, on the related underlying debt securities or to exercise any rights whatsoever as holders of the underlying debt securities.

DESCRIPTION OF WARRANTS TO PURCHASE COMMON STOCK

Holdings may issue (either separately or together with other offered securities) warrants to purchase common stock of Holdings (“common warrants”). We will issue the common warrants under warrant agreements (each, a “common warrant agreement”) to be entered into between Holdings and a bank or trust company, as warrant agent (the “common warrant agent”), identified in the prospectus supplement or term sheet.

Because this section is a summary, it does not describe every aspect of the common warrants and common warrant agreement.

General

You should read the prospectus supplement or term sheet for the material terms of the offered common warrants, including the following:

- The title and aggregate number of the common warrants.
- The number of shares of common stock that may be purchased upon exercise of each common warrant; the price, or the manner of determining the price, at which the shares may be purchased upon exercise; if other than cash, the property and manner in which the exercise price may be paid; and any minimum number of common warrants that must be exercised at any one time.
- The time or times at which, or period or periods in which, the common warrants may be exercised and the expiration date of the common warrants.
- Any optional redemption terms.
- The terms of any right that we may have to accelerate the exercise of the common warrants upon the occurrence of certain events.
- Whether the common warrants will be sold with any other offered securities and, if so, the amount and terms of these other securities.
- The date, if any, on and after which the common warrants and any other offered securities will be separately transferable.
- Any other terms of the common warrants.

The prospectus supplement or term sheet will also contain a discussion of the United States federal income tax considerations relevant to the offering.

Certificates representing common warrants will be exchangeable for new common warrant certificates of different denominations. We will not impose a service charge for any permitted transfer or exchange of common warrant certificates, but we may require payment of any tax or other governmental charge payable in connection therewith. Common warrants may be exercised at the corporate trust office of the common warrant agent or any other office indicated in the prospectus supplement or term sheet.

Exercise of Common Warrants

Each offered common warrant will entitle the holder thereof to purchase the number of shares of Holdings’ common stock at the exercise price set forth in, or calculable from, the prospectus supplement or term sheet relating to the common warrants. After the close of business on the applicable expiration date, unexercised common warrants will be void.

Common warrants may be exercised by payment to the common warrant agent of the exercise price and by delivery to the common warrant agent of the related common warrant certificate, with the reverse side thereof properly completed. Common warrants will be deemed to have been exercised upon receipt of the exercise price and the common warrant certificate or certificates. Upon receipt of the payment and the properly completed common warrant certificates, we will, as soon as practicable, deliver the shares of common stock purchased upon the exercise.

If fewer than all of the common warrants represented by any common warrant certificate are exercised, a new common warrant certificate will be issued for the unexercised offered common warrants. The holder of an offered common warrant will be required to pay any tax or other governmental charge that may be imposed in connection with any transfer involved in the issuance of common stock purchased upon exercise.

Modifications

There are three types of changes Holdings can make to a common warrant agreement and the common warrants issued thereunder.

Changes Requiring Your Approval. First, there are changes that cannot be made to your common warrants without your specific approval. Those types of changes include modifications and amendments that:

- accelerate the expiration date;
- reduce the number of outstanding common warrants, the consent of the holders of which is required for a modification or amendment; or
- otherwise materially and adversely affect the rights of the holders of the common warrants.

Changes Not Requiring Approval. The second type of change does not require any vote by holders of the common warrants. This type of change is limited to clarifications and other changes that would not materially adversely affect the interests of the holders of the common warrants.

Changes Requiring a Majority Vote. Any other change to the common warrant agreement requires a vote in favor by holders of not fewer than a majority in number of the then outstanding unexercised common warrants affected thereby. Most changes fall into this category.

Common Warrant Adjustments

The terms and conditions on which the exercise price of and/or the number of shares of common stock covered by a common warrant are subject to adjustment will be set forth in the common warrant agreement and the prospectus supplement or term sheet. The terms will include provisions for adjusting the exercise price and/or the number of shares of common stock covered by the common warrant; the events requiring the adjustment; the events upon which we may, in lieu of making the adjustment, make proper provisions so that the holder of a common warrant, upon exercise thereof, would be treated as if the holder had exercised the common warrant prior to the occurrence of the events; and provisions affecting exercise in the event of certain events affecting the common stock.

No Rights as Stockholders

Holders of common warrants are not entitled, by virtue of being holders, to receive dividends or to vote, consent or receive notice as our stockholders in respect of any meeting of stockholders for the election of our directors or for any other matter, or exercise any other rights whatsoever as our stockholders.

DESCRIPTION OF COMMON STOCK

The following summary describes elements of Holdings' Certificate of Incorporation and Bylaws.

Holdings' authorized capital stock consists of (i) 150,000,000 shares of common stock, par value \$0.01 per share, of which 114,554,229 shares were issued and outstanding as of November 1, 2022, (ii) 10,000,000 shares of preferred stock, par value \$0.01 per share of which no shares are issued and outstanding and (iii) 40,000,000 shares of series common stock, par value \$0.01 per share, of which no shares are issued and outstanding. The following description of Holdings' capital stock and related matters is qualified in its entirety by reference to the Certificate of Incorporation and the Bylaws, copies of which are on file with the SEC.

Common Stock

Voting Rights

Holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. The holders of common stock do not have cumulative voting rights in the election of directors.

Dividends

Holders of common stock are entitled to receive dividends if, as and when dividends are declared from time to time by Holdings' Board of Directors (the "Board") out of funds legally available therefor, after payment of dividends required to be paid on outstanding preferred stock or series common stock (as described below), if any.

Liquidation, Redemption and Preemptive Rights

In the event of liquidation, dissolution or winding up of Holdings, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities and accrued but unpaid dividends and liquidation preferences on any outstanding preferred stock or series common stock of Holdings. The common stock has no preemptive or conversion rights and is not subject to further calls or assessment by Holdings. There are no redemption or sinking fund provisions applicable to the common stock. The common stock sold by Holdings in an offering pursuant to this prospectus, when sold to the underwriters of such offering in the manner described in this prospectus and the prospectus supplement or term sheet relating to such offering will be, and all currently outstanding common stock of Holdings is, duly authorized, validly issued, fully paid and non-assessable.

Preferred Stock and Series Common Stock

The Certificate of Incorporation authorizes the Board to establish one or more series of preferred stock and series common stock and to determine, with respect to any series of preferred stock or series common stock, the terms and rights of such series, including (i) the designation of the series, (ii) the number of shares of the series, which number the Board may thereafter (except where otherwise provided in the preferred stock or series common stock designation) increase or decrease (but not below the number of shares thereof then outstanding), (iii) whether dividends, if any, will be cumulative or non-cumulative and the dividend rate of the series, (iv) the dates at which dividends, if any, will be payable, (v) the redemption rights and price or prices, if any, for shares of the series, (vi) the terms and amounts of any sinking fund provided for the purchase or redemption of shares of the series, (vii) the amounts payable on shares of the series in the event of any voluntary or involuntary liquidation, dissolution or winding-up of the affairs of Holdings, (viii) whether the shares of the series will be convertible into shares of any other class or series, or any other security, of Holdings or any other corporation, and, if so, the specification of such other class or series or such other security, the conversion price or prices or rate or rates, any adjustments thereof, the date or dates as of which such shares shall be convertible and all other terms and conditions upon which such conversion may be made, (ix) restrictions on the issuance of shares of the same series or of any other class or series, and (x) the voting rights, if any, of the holders of such series. The authorized shares of preferred stock and series common stock, as well as shares of common stock, will be available for issuance without further action

by Holdings' stockholders, unless such action is required by applicable law or the rules of any stock exchange or automated quotation system on which Holdings' securities may be listed or traded.

Although the Board has no intention at the present time of doing so, it could issue a series of preferred stock or series common stock that could, depending on the terms of such series, impede the completion of a merger, tender offer or other takeover attempt. The Board will make any determination to issue such shares based on its judgment as to the best interests of Holdings and its stockholders. The Board, in so acting, could issue preferred stock or series common stock having terms that could discourage an acquisition attempt or other transaction that some, or a majority, of Holdings' stockholders might believe to be in their best interests or in which stockholders might receive a premium for their stock over the then-current market price of such stock.

Authorized but Unissued Capital Stock

Delaware law does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of the New York Stock Exchange, which would apply so long as the common stock remains listed on the New York Stock Exchange, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock, preferred stock and series common stock may be to enable the Board to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of Holdings by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of Holdings' management and possibly deprive the stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

The Delaware General Corporation Law

Holdings is a Delaware corporation subject to Section 203 of the Delaware General Corporation Law (the "DGCL"). Section 203 provides that, subject to certain exceptions specified therein, a Delaware corporation shall not engage in certain "business combinations" with any "interested stockholder" for a three-year period following the time that such stockholder became an interested stockholder unless (i) the corporation has elected in its certificate of incorporation not to be governed by Section 203 (Holdings has not made such an election), (ii) prior to such time, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder, (iii) upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced (excluding certain shares), or (iv) at or subsequent to such time, the business combination is approved by the board of directors of the corporation and by the affirmative vote of at least 66²/₃% of the outstanding voting stock which is not owned by the interested stockholder. The three-year prohibition also does not apply to certain business combinations proposed by an interested stockholder following the announcement or notification of certain extraordinary transactions involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of a majority of the corporation's directors. The term "business combination" is defined generally to include mergers or consolidations between a Delaware corporation and an "interested stockholder," transactions with an "interested stockholder" involving the assets or stock of the corporation or its majority-owned subsidiaries and transactions which increase an interested stockholder's percentage ownership of stock. Except as specified in Section 203 of the DGCL, an "interested stockholder" is defined to include any person, other than the corporation and any direct or indirect majority-owned subsidiary, that is (x) the owner of 15% or more of the outstanding voting stock of the corporation, or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation, at any time within three years immediately prior to the relevant date or (y) the affiliates and associates of any such person.

Under certain circumstances, Section 203 makes it more difficult for a person who would be an "interested stockholder" to effect various business combinations with a corporation for a three-year period.

The provisions of Section 203 may encourage companies interested in acquiring Holdings to negotiate in advance with the Board, because the stockholder approval requirement would be avoided if the Board approves either the business combination or the transaction which results in the stockholder becoming an interested stockholder. Such provisions also may have the effect of preventing changes in the Board and may make it more difficult to accomplish transactions which stockholders may otherwise deem to be in their best interests.

Certificate of Incorporation; Bylaws

The Certificate of Incorporation and the Bylaws contain certain provisions that could make more difficult the acquisition of Holdings by means of a tender offer, a proxy contest or otherwise.

Classified Board. The Certificate of Incorporation provides that the Board will be divided into three classes of directors, with the classes to be as nearly equal in number as possible. As a result, approximately one-third of the Board will be elected each year. The classification of directors will have the effect of making it more difficult for stockholders to change the composition of the Board. The Certificate of Incorporation provides that, subject to any rights of holders of preferred stock or series common stock to elect additional directors under specified circumstances, the number of directors will be fixed in the manner provided in the Bylaws. The Certificate of Incorporation and the Bylaws provide that the number of directors will be fixed from time to time exclusively pursuant to a resolution adopted by the Board, but must consist of not less than three directors. In addition, the Certificate of Incorporation provides that, subject to any rights of holders of preferred stock, and unless the Board otherwise determines, any vacancies will be filled only by the affirmative vote of a majority of the remaining directors, though less than a quorum.

Removal of Directors. Under the DGCL, unless otherwise provided in the Certificate of Incorporation, directors serving on a classified board may be removed by the stockholders only for cause. In addition, the Certificate of Incorporation and the Bylaws provide that directors may be removed only for cause and only upon the affirmative vote of holders of at least 75% of the voting power of all the then outstanding shares of stock entitled to vote generally in the election of directors (“Voting Stock”), voting together as a single class.

Stockholder Action. The Certificate of Incorporation and the Bylaws provide that stockholder action can be taken only at an annual or special meeting of stockholders and may not be taken by written consent in lieu of a meeting. The Certificate of Incorporation and the Bylaws provide that special meetings of stockholders can be called only by Holdings’ Chief Executive Officer or pursuant to a resolution adopted by the Board. Stockholders are not permitted to call a special meeting or to require that the Board call a special meeting of stockholders. Moreover, the business permitted to be conducted at any special meeting of stockholders is limited to the business brought before the meeting pursuant to the notice of meeting given by Holdings.

Advance Notice Procedures. The Bylaws establish an advance notice procedure for stockholders to make nominations of candidates for election as directors, or bring other business before an annual or special meeting of stockholders of Holdings (the “Stockholders Notice Procedure”). The Stockholders Notice Procedure provides that only persons who are nominated by, or at the direction of the Board, the Chairman of the Board, or by a stockholder who has given timely written notice to the Secretary of Holdings prior to the meeting at which directors are to be elected, will be eligible for election as directors of Holdings. The Stockholders Notice Procedure also provides that at an annual meeting only such business may be conducted as has been brought before the meeting pursuant to the notice of meeting delivered by Holdings or by, or at the direction of, the Chairman of the Board or by a stockholder who is entitled to vote at the meeting and who has given timely written notice to the Secretary of Holdings of such stockholder’s intention to bring such business before such meeting. Under the Stockholders Notice Procedure, for notice of stockholder nominations to be made at an annual meeting to be timely, such notice must be received by Holdings not less than 70 days nor more than 90 days prior to the first anniversary of the previous year’s annual meeting (or, if the date of the annual meeting is advanced by more than 20 days or delayed by more than 70 days from such anniversary date, not earlier than the 90th day prior to such meeting and not later than the later of (x) the 70th day prior to such meeting and (y) the 10th day after public announcement of the date of such meeting is first made). Notwithstanding the foregoing, in the event that the number of directors to be elected is increased and there is no public announcement naming all of the nominees for director or

specifying the size of the increased Board of Directors made by Holdings at least 80 days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice will be timely, but only with respect to nominees for any new positions created by such increase, if it is received by Holdings not later than the 10th day after such public announcement is first made by Holdings. Under the Stockholders Notice Procedure, for notice of a stockholder nomination to be made at a special meeting at which directors are to be elected to be timely, such notice must be received by Holdings not earlier than the 90th day before such meeting and not later than the later of (x) the 70th day prior to such meeting and (y) the 10th day after the public announcement of the date of such meeting is first made. In addition, under the Stockholders Notice Procedure, a stockholder's notice to Holdings proposing to nominate a person for election as a director or relating to the conduct of business other than the nomination of directors must contain certain specified information. If the Chairman of the Board or other officer presiding at a meeting determines that a person was not nominated, or other business was not brought before the meeting, in accordance with the Stockholders Notice Procedure, such person will not be eligible for election as a director, or such business will not be conducted at such meeting, as the case may be.

Proxy Access. The Bylaws contain a proxy access provision which allows eligible stockholders who comply with the requirements set forth in the Bylaws to include their own director nominees in Holdings' proxy statement along with the candidates nominated by the Board. Pursuant to the proxy access provision, a stockholder, or group of up to 20 stockholders, owning an aggregate of 3% or more of Holdings' outstanding capital stock continuously for at least three years, may nominate a candidate for election to the Board and such candidate will be included in Holdings' proxy statement for the applicable annual meeting of Holdings' stockholders. Holdings will not be required, however, to include in its proxy statement more stockholder nominees than that number constituting the greater of (i) two and (ii) 20% of the total number of directors of Holdings then serving on the Board.

Liability of Directors; Indemnification. The Certificate of Incorporation provides that a director will not be personally liable for monetary damages to Holdings or its stockholders for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL. The Certificate of Incorporation also provides that each current or former director, officer, employee or agent of Holdings, or each such person who is or was serving or who had agreed to serve at the request of Holdings as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise (including the heirs, executors, administrators or estate of such person), will be indemnified by Holdings to the full extent permitted by the DGCL, as the same exists or may in the future be amended (but, in the case of any such amendment, only to the extent that such amendment permits Holdings to provide broader indemnification rights than said law permitted Holdings to provide prior to such amendment). The Certificate of Incorporation also specifically authorizes Holdings to enter into agreements with any person providing for indemnification greater or different than that provided by the Certificate of Incorporation.

Amendment. The Certificate of Incorporation provides that the affirmative vote of the holders of at least 75% of the voting power of the outstanding shares of Voting Stock, voting together as a single class, is required to amend provisions of the Certificate of Incorporation relating to the prohibition of stockholder action without a meeting; the number, election and term of Holdings' directors; and the removal of directors. The Certificate of Incorporation further provides that the Bylaws may be amended by the Board or by the affirmative vote of the holders of at least 75% of the outstanding shares of Voting Stock, voting together as a single class.

The description set forth above is intended as a summary only and is qualified in its entirety by reference to the Certificate of Incorporation and the Bylaws, copies of which are exhibits to the Registration Statement of which this prospectus is a part.

Registrar and Transfer Agent

The registrar and transfer agent for the common stock is Computershare Trust Co. of New York.

Listing

Holdings' common stock is listed on the New York Stock Exchange under the symbol "AXL."

DESCRIPTION OF PREFERRED STOCK

Under Holdings' Certificate of Incorporation, it is authorized to adopt resolutions providing for the issuance, in one or more series, of up to 10,000,000 shares of preferred stock, \$0.01 par value, with the powers, preferences and relative, participating, optional or other special rights and qualifications, limitations or restrictions thereof adopted by the Board of Directors or a duly authorized committee thereof.

Because this section is a summary, it does not describe every aspect of Holdings' preferred stock. We urge you to read Holdings' Certificate of Incorporation and the certificate of designations creating your preferred stock because they, and not this description, define your rights as a holder of preferred stock. Holdings has filed the Certificate of Incorporation and will file the certificate of designations with the SEC. See "Where You Can Find More Information" for information on how to obtain copies of these documents.

The specific material terms of any preferred stock proposed to be sold under this prospectus and an attached prospectus supplement or term sheet will be described in the prospectus supplement or term sheet. If so indicated in the prospectus supplement or term sheet, the terms of the offered preferred stock may differ from the terms set forth below.

General

Unless otherwise specified in the prospectus supplement or term sheet relating to the offered preferred stock, each series of preferred stock will rank on a parity as to dividends and distribution of assets upon liquidation and in all other respects with all other series of preferred stock. The preferred stock will, when issued, be fully paid and nonassessable and holders thereof will have no preemptive rights.

You should read the prospectus supplement or term sheet for the material terms of the preferred stock offered thereby, including the following:

- The title and stated value of the preferred stock.
- The number of shares of the preferred stock offered, the liquidation preference per share and the offering price of the preferred stock.
- The dividend rate(s), period(s) and/or payment date(s) or method(s) of calculation thereof applicable to the preferred stock.
- The date from which dividends on the preferred stock will accumulate, if applicable.
- The liquidation rights of the preferred stock.
- The procedures for any auction and remarketing, if any, of the preferred stock.
- The sinking fund provisions, if applicable, for the preferred stock.
- The redemption provisions, if applicable, for the preferred stock.
- Whether the preferred stock will be convertible into or exchangeable for other securities and, if so, the terms and conditions of conversion or exchange, including the conversion price or exchange ratio and the conversion or exchange period (or the method of determining the same).
- Whether the preferred stock will have voting rights and the terms thereof, if any.
- Whether the preferred stock will be listed on any securities exchange.
- Whether the preferred stock will be issued with any other securities and, if so, the amount and terms of these other securities.
- Any other specific material terms, preferences or rights of, or limitations or restrictions on, the preferred stock.

Subject to Holdings' Certificate of Incorporation and to any limitations contained in its outstanding preferred stock, Holdings may issue additional series of preferred stock, at any time or from time to time, with the powers, preferences and relative, participating, optional or other special rights and qualifications,

limitations or restrictions thereof, as the Board of Directors or any duly authorized committee thereof may determine, all without further action of its stockholders, including holders of its then outstanding preferred stock.

If applicable, the prospectus supplement or term sheet will also contain a discussion of the material United States federal income tax considerations relevant to the offering.

Dividends

Holders of preferred stock will be entitled to receive cash dividends, when, as and if declared by the Board of Directors, out of Holdings' assets legally available for payment, at the rate and on the dates set forth in the prospectus supplement or term sheet. Each dividend will be payable to holders of record as they appear on Holdings' stock books on the record date fixed by the Board of Directors. Dividends, if cumulative, will be cumulative from and after the date set forth in the applicable prospectus supplement or term sheet.

Holdings may not:

- declare or pay dividends (except in its stock that is junior as to dividends and liquidation rights to the preferred stock ("junior stock")) or make any other distributions on junior stock, or
- purchase, redeem or otherwise acquire junior stock or set aside funds for that purpose (except in a reclassification or exchange of junior stock through the issuance of other junior stock or with the proceeds of a reasonably contemporaneous sale of junior stock),

if there are arrearages in dividends or failure in the payment of the sinking fund or redemption obligations on any of Holdings' preferred stock and, in the case of the first bullet point above, if dividends in full for the current quarterly dividend period have not been paid or declared on any of Holdings' preferred stock.

Dividends in full may not be declared or paid or set apart for payment on any series of preferred stock unless:

- there are no arrearages in dividends for any past dividend periods on any series of preferred stock, and
- to the extent that the dividends are cumulative, dividends in full for the current dividend period have been declared or paid on all preferred stock.

Any dividends declared or paid when dividends are not so declared, paid or set apart in full will be shared ratably by the holders of all series of preferred stock in proportion to the respective arrearages and undeclared and unpaid current cumulative dividends. No interest, or sum of money in lieu of interest, will be payable in respect of any dividend payment or payments that may be in arrears.

Conversion and Exchange

If the preferred stock will be convertible into or exchangeable for common stock or other securities, the prospectus supplement or term sheet will set forth the terms and conditions of that conversion or exchange, including the conversion price or exchange ratio (or the method of calculating the same), the conversion or exchange period (or the method of determining the same), whether conversion or exchange will be mandatory or at the option of the holder or us, the events requiring an adjustment of the conversion price or the exchange ratio and provisions affecting conversion or exchange in the event of the redemption of that preferred stock. These terms may also include provisions under which the number of shares of common stock or the number or amount of other securities to be received by the holders of that preferred stock upon conversion or exchange would be calculated according to the market price of the common stock or those other securities as of a time stated in the prospectus supplement or term sheet.

Liquidation Rights

In the event of Holdings' voluntary or involuntary liquidation, dissolution or winding up, the holders of each series of the preferred stock will be entitled to receive out of the assets that are available for distribution to stockholders, before any distribution of assets is made to holders of any junior stock,

liquidating distributions in the amount set forth in the applicable prospectus supplement or term sheet plus all accrued and unpaid dividends. If, upon Holdings' voluntary or involuntary liquidation, dissolution or winding up, the amounts payable with respect to the preferred stock are not paid in full, the holders of preferred stock of each series will share ratably in the distribution of assets in proportion to the full respective preferential amounts to which they are entitled. After payment of the full amount of the liquidating distribution to which they are entitled, the holders of the preferred stock will not be entitled to any further participation in any distribution of assets. Holdings' consolidation or merger with or into any other corporation or corporations or a sale of all or substantially all of its assets will not be deemed to be a liquidation, dissolution or winding up for purposes of these provisions.

Redemption

If so provided in the prospectus supplement or term sheet, the offered preferred stock may be redeemable in whole or in part at Holdings' option at the times and at the redemption prices set forth therein.

If dividends on any series of preferred stock are in arrears or Holdings has failed to fulfill its sinking fund or redemption obligations with respect to any series of preferred stock, Holdings may not purchase or redeem shares of preferred stock or any other capital stock ranking on a parity with or junior to the preferred stock as to dividends or upon liquidation, nor permit any subsidiary to do so, without in either case the consent of the holders of at least two-thirds of each series of preferred stock then outstanding; *provided, however*, that:

- to meet purchase, retirement or sinking fund obligations with respect to any series of preferred stock, Holdings may use shares of that preferred stock acquired prior to the arrearages or failure of payment and then held as treasury stock, and
- Holdings may complete the purchase or redemption of shares of preferred stock for which a contract was entered into for any purchase, retirement or sinking fund purposes prior to the arrearages or failure of payment.

Voting Rights

Except as indicated below or in the prospectus supplement or term sheet, or except as expressly required by applicable law, the holders of the preferred stock will not be entitled to vote. As used herein, the term "applicable preferred stock" means those series of preferred stock to which the provisions described herein are expressly made applicable by resolutions of the Board of Directors.

If the equivalent of six quarterly dividends payable on any shares of any series of applicable preferred stock are in default (whether or not the dividends have been declared or the defaulted dividends are consecutive), the number of directors will be increased by two and the holders of all outstanding series of applicable preferred stock, voting as a single class without regard to series, will be entitled to elect the two additional directors until four consecutive quarterly dividends are paid or declared and set apart for payment, if the shares are cumulative, or until all arrearages in dividends and dividends in full for the current quarterly period are paid or declared and set apart for payment, if the shares are non-cumulative, whereupon all voting rights described herein will be divested from the applicable preferred stock. The holders of applicable preferred stock may exercise their special class voting rights at meetings of the stockholders for the election of directors or at special meetings for the purpose of electing directors, in either case at which the holders of not less than one-third of the aggregate number of shares of applicable preferred stock are present in person or by proxy.

The affirmative vote of the holders of at least two-thirds of the outstanding shares of any series of preferred stock will be required:

- for any amendment of the Certificate of Incorporation (or the related certificate of designations) that will adversely affect the powers, preferences or rights of the holders of the preferred stock of that series, or
- to create any class of stock (or increase the authorized number of shares of any class of stock) that will have preference as to dividends or upon liquidation over the preferred stock of that series or create

any stock or other security convertible into or exchangeable for or evidencing the right to purchase any stock of that class.

In addition, the affirmative vote of the holders of a majority of all the shares of Holdings' preferred stock then outstanding will be required to increase the authorized amount of preferred stock.

SPECIAL PROVISIONS RELATING TO FOREIGN CURRENCY DEBT SECURITIES

General

Unless otherwise indicated in the applicable prospectus supplement or term sheet, the debt securities will be denominated in U.S. dollars, payments of principal of, premium, if any, and interest on the debt securities will be made in U.S. dollars and payment of the purchase price of the debt securities must be made in immediately available funds. If any of the debt securities (“Foreign Currency Debt Securities”) are to be denominated or payable in a currency (a “specified currency”) other than U.S. dollars, the following provisions will apply in addition to, and to the extent inconsistent therewith will replace, the description of general terms and provisions of debt securities set forth in the accompanying prospectus and elsewhere in this prospectus.

A prospectus supplement or term sheet with respect to any Foreign Currency Debt Security (which may include information with respect to applicable current foreign exchange controls) is a part of this prospectus and prospectus supplement or term sheet. Any information concerning exchange rates is furnished as a matter of information only and should not be regarded as indicative of the range of or trends in fluctuations in currency exchange rates that may occur in the future.

Currencies

We may offer Foreign Currency Debt Securities denominated and/or payable in a specified currency or specified currencies. Unless otherwise indicated in the applicable prospectus supplement or term sheet, purchasers are required to pay for Foreign Currency Debt Securities in the specified currency. At the present time, there are limited facilities in the United States for conversion of U.S. dollars into specified currencies and vice versa, and banks may elect not to offer non-U.S. dollar checking or savings account facilities in the United States. However, if requested on or prior to the fifth Business Day preceding the date of delivery of the Foreign Currency Debt Securities, or by such other day as determined by the agent who presents such offer to purchase Foreign Currency Debt Securities to us, such agent may be prepared to arrange for the conversion of U.S. dollars into the specified currency set forth in the applicable prospectus supplement or term sheet to enable the purchasers to pay for the Foreign Currency Debt Securities. Each such conversion will be made by the agents on such terms and subject to such conditions, limitations and charges as the agents may from time to time establish in accordance with their regular foreign exchange practices. All costs of exchange will be borne by the purchasers of the Foreign Currency Debt Securities.

Information about the specified currency in which a particular Foreign Currency Debt Security is denominated and/or payable, including historical exchange rates and a description of the currency and any exchange controls, will be set forth in the applicable prospectus supplement or term sheet.

Payment of Principal and Interest

The principal of, premium, if any, and interest on Foreign Currency Debt Securities are payable by us in the specified currency. Currently, banks do not generally offer non-U.S. dollar-denominated account facilities in their offices in the United States, although they are permitted to do so. Accordingly, a holder of Foreign Currency Debt Securities will be paid in U.S. dollars converted from the specified currency unless the holder is entitled to elect, and does elect, to be paid in the specified currency, or as otherwise specified in the applicable prospectus supplement or term sheet.

Any U.S. dollar amount to be received by a holder of a Foreign Currency Debt Security will be based on the highest bid quotation in The City of New York received by an agent for us specified in the applicable prospectus supplement or term sheet (the “Exchange Rate Agent”) at approximately 11:00 A.M., New York City time, on the second Business Day preceding the applicable payment date from three recognized foreign exchange dealers (one of whom may be the Exchange Rate Agent) selected by the Exchange Rate Agent and approved by us for the purchase by the quoting dealer of the specified currency for U.S. dollars for settlement on the payment date in the aggregate amount of the specified currency payable to all holders of Foreign Currency Debt Securities scheduled to receive U.S. dollar payments and at which the applicable dealer commits to execute a contract. If three bid quotations are not available, payments will be made in the

specified currency. All currency exchange costs will be borne by the holder of the Foreign Currency Debt Security by deductions from such payments.

Unless otherwise indicated in the applicable prospectus supplement or term sheet, a holder of Foreign Currency Debt Securities may elect to receive payment of the principal of, and premium, if any, and interest on the Foreign Currency Debt Securities in the specified currency by transmitting a written request for such payment to the corporate trust office of the trustee in The City of New York on or prior to the regular record date or at least fifteen calendar days prior to Maturity Date, as the case may be. This request may be in writing (mailed or hand delivered) or sent by cable, telex or other form of facsimile transmission. A holder of a Foreign Currency Debt Security may elect to receive payment in the specified currency for all principal, premium, if any, and interest payments and need not file a separate election for each payment. This election will remain in effect until revoked by written notice to the trustee, but written notice of any revocation must be received by the trustee on or prior to the regular record date or at least fifteen calendar days prior to the Maturity Date, as the case may be. Holders of Foreign Currency Debt Securities whose debt securities are to be held in the name of a broker or nominee should contact their brokers or nominees to determine whether and how an election to receive payments in the specified currency may be made.

Unless otherwise specified in the applicable prospectus supplement or term sheet, if the specified currency is other than U.S. dollars, a beneficial owner of the related global security who elects to receive payments of principal, premium, if any, and/or interest, if any, in the specified currency must notify its participant through which it owns its beneficial interest on or prior to the applicable record date or at least fifteen calendar days prior to the Maturity Date, as the case may be, of such beneficial owner's election. The participant must notify the depository of such election on or prior to the third Business Day after such record date or at least 12 calendar days prior to the Maturity Date, as the case may be, and the depository will notify the trustee of such election on or prior to the fifth Business Day after such record date or at least ten calendar days prior to the Maturity Date, as the case may be. If complete instructions are received by the participant from the beneficial owner and forwarded by the participant to the depository, and by the depository to the trustee, on or prior to such dates, then the beneficial owner will receive payments in the specified currency. See "Description of Debt Securities — Global Securities" in the accompanying prospectus.

Principal and interest on Foreign Currency Debt Securities paid in U.S. dollars will be paid in the manner specified in the accompanying prospectus supplement or term sheet and this prospectus with respect to debt securities denominated in U.S. dollars. Interest on Foreign Currency Debt Securities paid in the specified currency will be paid by check mailed on an Interest Payment Date other than a Maturity Date to the persons entitled thereto to the addresses of such holders as they appear in the security register or, at our option, by wire transfer to a bank account maintained by the holder in the country of the specified currency. The principal of, premium, if any, and interest on Foreign Currency Debt Securities, together with interest accrued and unpaid thereon, due on the Maturity Date will be paid, in the specified currency in immediately available funds upon surrender of such debt securities at the corporate trust office of the trustee in The City of New York, or, at our option, by wire transfer to such bank account of immediately available funds to an account with a bank designated at least 15 calendar days prior to the Maturity Date by the applicable registered holder, provided the particular bank has appropriate facilities to make these payments and the particular Foreign Currency Debt Security is presented and surrendered at the office or agency maintained by us for this purpose in the Borough of Manhattan, The City of New York, in time for the trustee to make these payments in accordance with its normal procedures.

Payment Currency

If a specified currency is not available for the payment of principal, premium or interest with respect to a Foreign Currency Debt Security due to the imposition of exchange controls or other circumstances beyond our control, we will be entitled to satisfy our obligations to holders of Foreign Currency Debt Securities by making such payment in U.S. dollars on the basis of the noon buying rate in The City of New York for cable transfers of the specified currency as certified for customs purposes (or, if not so certified, as otherwise determined) by the Federal Reserve Bank of New York (the "Market Exchange Rate") as computed by the Exchange Rate Agent on the second Business Day prior to such payment or, if not then available, on the basis of the most recently available Market Exchange Rate or as otherwise indicated in an applicable prospectus

supplement or term sheet. Any payment made under these circumstances in U.S. dollars where the required payment is in a specified currency will not constitute a default under the Indenture with respect to the Debt Securities.

All determinations referred to above made by the Exchange Rate Agent will be at its sole discretion and will, in the absence of manifest error, be conclusive for all purposes and binding on the holders of the Foreign Currency Debt Securities.

AS INDICATED ABOVE, AN INVESTMENT IN FOREIGN CURRENCY DEBT SECURITIES OR CURRENCY INDEXED DEBT SECURITIES INVOLVES SUBSTANTIAL RISKS, AND THE EXTENT AND NATURE OF SUCH RISKS CHANGE CONTINUOUSLY. AS WITH ANY INVESTMENT IN A SECURITY, PROSPECTIVE PURCHASERS SHOULD CONSULT THEIR OWN FINANCIAL AND LEGAL ADVISORS AS TO THE RISKS ENTAILED IN AN INVESTMENT IN FOREIGN CURRENCY DEBT SECURITIES OR CURRENCY INDEXED DEBT SECURITIES. SUCH DEBT SECURITIES ARE NOT AN APPROPRIATE INVESTMENT FOR PROSPECTIVE PURCHASERS WHO ARE UNSOPHISTICATED WITH RESPECT TO FOREIGN CURRENCY MATTERS.

PLAN OF DISTRIBUTION

We may sell the offered securities:

- through agents;
- to or through underwriters or dealers;
- directly to other purchasers; or
- through a combination of any of these methods of sale.

Any underwriters or agents will be identified and their discounts, commissions and other items constituting underwriters' compensation and any securities exchanges on which the securities are listed will be described in the applicable prospectus supplement or term sheet.

We (directly or through agents) may sell, and the underwriters may resell, the offered securities in one or more transactions, including negotiated transactions, at a fixed public offering price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices.

In order to facilitate the offering of the debt securities, the underwriters or agents may engage in transactions that stabilize, maintain or otherwise affect the price of the debt securities and our common stock. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters or agents of a greater number of debt securities than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' or agents' option to purchase additional debt securities from us in the offering. The underwriters or agents may close out any covered short position by either exercising the option to purchase additional debt securities or purchasing debt securities in the open market. In determining the source of debt securities to close out the covered short position, the underwriters or agents will consider, among other things, the price of debt securities available for purchase in the open market as compared to the price at which they may purchase debt securities through the option. "Naked" short sales are sales in excess of the option. The underwriters or agents must close out any naked short position by purchasing debt securities in open market. A naked short position is more likely to be created if the underwriters or agents are concerned that there may be a downward pressure on the price of the debt securities in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of certain bids for or purchases of the debt securities made by the underwriters or agents in the open market prior to the completion of the offering. Any of these activities may stabilize or maintain the market price of the debt securities above independent market levels. The underwriters or agents are not required to engage in these activities, and may end any of these activities at any time.

In connection with the sale of offered securities, the underwriters or agents may receive compensation from us or from purchasers of the offered securities for whom they may act as agents. The underwriters may sell offered securities to or through dealers, who may also receive compensation from purchasers of the offered securities for whom they may act as agents. Compensation may be in the form of discounts, concessions or commissions. Underwriters, dealers and agents that participate in the distribution of the offered securities may be underwriters as defined in the Securities Act of 1933 (the "Act"), and any discounts or commissions received by them from us and any profit on the resale of the offered securities by them may be treated as underwriting discounts and commissions under the Act.

We will indemnify the underwriters and agents against certain civil liabilities, including liabilities under the Act, or contribute to payments they may be required to make in respect of such liabilities.

Underwriters, dealers and agents may engage in transactions with, or perform services for, us or our affiliates in the ordinary course of their businesses.

If so indicated in the prospectus supplement or term sheet relating to a particular series or issue of offered securities, we will authorize underwriters, dealers or agents to solicit offers by certain institutions to purchase the offered securities from us under delayed delivery contracts providing for payment and delivery at a future date. These contracts will be subject only to those conditions set forth in the prospectus supplement or term sheet, and the prospectus supplement or term sheet will set forth the commission payable for solicitation of these contracts.

LEGAL MATTERS

The validity of the Holdings and AAM Inc. securities will be passed upon for us by Shearman & Sterling LLP, New York, New York. David E. Barnes, who is General Counsel of Holdings and AAM Inc., will give us an opinion about the validity of the guarantees by the Subsidiary Guarantors. Mr. Barnes owns Holdings common stock.

EXPERTS

The consolidated financial statements, and the related financial statement schedule, of Holdings incorporated by reference in this prospectus, and the effectiveness of Holdings's internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such consolidated financial statements, and financial statement schedule, are incorporated by reference in reliance upon the report of such firm, given their authority as experts in accounting and auditing.



AMERICAN AXLE & MANUFACTURING, INC.
AMERICAN AXLE & MANUFACTURING HOLDINGS, INC.

Debt Securities
Guarantees
Warrants to Purchase Debt Securities
Warrants to Purchase Common Stock
Common Stock
Preferred Stock

PROSPECTUS

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses in connection with the issuance and distribution of the securities being registered, other than underwriting discounts and commissions. All of the amounts shown are estimates, except the SEC registration fee.

SEC registration fee	*
Printing and engraving	\$ +
Legal fees and expenses	+
Accounting fees	+
Trustee's fees	+
Total	\$ +

* Deferred in accordance with Rules 456(b) and 457(r) of the Securities Act of 1933.

+ Estimated expenses are not presently known.

Item 15. Indemnification of Directors and Officers.

Section 145 of the General Corporation Law of Delaware authorizes the Registrant to indemnify its directors and officers under specified circumstances. Article Twelve of the Certificate of Incorporation of the Registrant provides in effect that the Registrant shall provide certain indemnification of its directors and officers.

Section 145 of the General Corporation Law of Delaware also authorizes the Registrant to indemnify persons who serve as directors or officers of the Registrant at the request of the Registrant under specified circumstances. Article Six of the Restated Certificate of Incorporation of the Registrant provides in effect that the Registrant shall provide certain indemnification to such persons under certain circumstances.

The directors and officers of the Registrant are insured, under policies of insurance maintained by the Registrant, within the limits and subject to the limitations of the policies, against certain expenses in connection with the defense of actions, suits or proceedings, to which they are parties by reason of being or having been such directors or officers.

The underwriting agreement basic provisions will provide for indemnification of directors, officers who sign the Registration Statement and controlling persons of the Registrant by the underwriters, and for indemnification of each underwriter and its controlling persons by the Registrant, against certain liabilities. Similar provisions are contained in agreements entered into between the Registrant and groups of underwriters on past occasions.

Item 16. List of Exhibits.

We have filed or incorporated by reference the exhibits listed on the accompanying Exhibit Index of this Registration Statement.

EXHIBIT INDEX

<u>Exhibit</u>	
+1.1	<u>Form of Debt Securities Underwriting Agreement (Incorporated by reference to Exhibit 1.1 filed with American Axle & Manufacturing Holdings, Inc. Registration Statement on Form S-3 dated March 30, 2017 (Registration No. 333-217033))</u>
*1.2	Form of Equity Securities Underwriting Agreement
+3.1	<u>Amended and Restated Certificate of Incorporation of American Axle & Manufacturing Holdings, Inc. (Incorporated by reference to Exhibit 3.2 filed with American Axle & Manufacturing Holdings, Inc. Registration Statement on Form S-8 (Registration No. 333-220300))</u>
+3.2	<u>Third Amended and Restated By-laws of American Axle & Manufacturing Holdings, Inc. (Incorporated by reference to Exhibit 3.04 to the Current Report on Form 8-K filed by American Axle & Manufacturing Holdings, Inc. with the SEC on February 12, 2018, File No. 001-14303)</u>
+4.1	<u>Specimen Certificate for shares of American Axle & Manufacturing Holdings, Inc.'s Common Stock (Incorporated by reference to Exhibit 4.01 filed with American Axle & Manufacturing Holdings, Inc. Registration Statement on Form S-1 (Registration No. 333-53491))</u>
*4.2	Form of Certificate of Designations of Preferred Stock
+4.3	<u>Indenture, dated November 3, 2011, among American Axle & Manufacturing, Inc., American Axle & Manufacturing Holdings, Inc., as guarantor, certain subsidiary guarantors and U.S. Bank National Association, as trustee (Incorporated by reference to Exhibit 4.1 filed with American Axle & Manufacturing Holdings, Inc. Current Report on Form 8-K dated October 31, 2011, File No. 001-14303)</u>
+4.4	<u>First Supplemental Indenture, dated March 23, 2017, among American Axle & Manufacturing, Inc., Alpha SPV I, Inc., American Axle & Manufacturing Holdings, Inc. certain subsidiary guarantors and U.S. Bank National Association, as trustee (Incorporated by reference to Exhibit 4.1 filed with American Axle & Manufacturing Holdings, Inc. Current Report on Form 8-K dated March 23, 2017, File No. 001-14303)</u>
+4.5	<u>Second Supplemental Indenture, dated as of May 17, 2017, among American Axle & Manufacturing, Inc., Metaldyne Performance Group Inc., American Axle & Manufacturing Holdings, Inc. certain subsidiary guarantors and U.S. Bank National Association, as trustee (Incorporated by reference to Exhibit 4.1 filed with American Axle & Manufacturing Holdings, Inc. Current Report on Form 8-K dated May 17, 2017, File No. 001-14303)</u>
+4.6	<u>Third Supplemental Indenture, dated as of March 23, 2018, among American Axle & Manufacturing, Inc., American Axle & Manufacturing Holdings, Inc., certain subsidiary guarantors and U.S. Bank National Association, as trustee (Incorporated by reference to Exhibit 4.1 filed with American Axle & Manufacturing Holdings, Inc. Current Report on Form 8-K dated March 26, 2018, File No. 001-14303)</u>
+4.7	<u>Registration Rights Agreement, dated as of March 23, 2017, among American Axle & Manufacturing, Inc., certain subsidiary guarantors and J.P. Morgan Securities LLC, as representative of the Initial Purchasers, in respect of the 6.50% Senior Notes due 2027 (Incorporated by reference to Exhibit 10.2 of Current Report on Form 8-K dated March 23, 2017)</u>
+4.8	<u>Form of 6.50% Notes due 2027 (Incorporated by Reference to Exhibit 4.3 of Current Report on Form 8-K dated March 23, 2017)</u>
+4.9	<u>Form of 6.25% Notes due 2026 (Incorporated by reference to Exhibit 4.1 of Current Report on Form 8-K dated March 27, 2018.)</u>

<u>Exhibit</u>	
+4.10	Form of 6.875% Notes due 2028 (Incorporated by reference to Exhibit 4.1 of Current Report on Form 8-K dated June 12, 2020)
+4.11	Form of 5.00% Notes due 2029 (Incorporated by reference to Exhibit 4.1 of Current Report on Form 8-K dated August 19, 2021)
*4.12	Form of Debt Securities
*4.13	Form of Warrant Agreement (including Form of Warrant)
5.1	Opinion of Shearman & Sterling LLP as to legality of certain of the Securities
5.2	Opinion of David E. Barnes, General Counsel of American Axle & Manufacturing Holdings, Inc. and American Axle & Manufacturing, Inc., as to the legality of the Subsidiary Guarantees
23.1	Consent of Deloitte & Touche LLP
23.2	Consent of Shearman & Sterling LLP (included in Exhibit 5.1)
23.3	Consent of David E. Barnes (included in Exhibit 5.2)
24.1	Power of Attorney (included in signature pages)
25.1	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939 of U.S. Bank Trust Company, National Association, as Trustee for the Debt Securities
107	Filing Fee Table

* To be filed as an exhibit to a Current Report on Form 8-K in connection with a specific offering.

+ Incorporated by reference.

Item 17. Undertakings.

(a) Each undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) under the Securities Act of 1933 if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.

provided, however, that clauses (i), (ii) and (iii) do not apply if the information required to be included in a post-effective amendment by those clauses is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the Registration Statement as of the date the filed prospectus was deemed part of and included in the Registration Statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the Registration Statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the Registration Statement relating to the securities in the Registration Statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; *provided, however*, that no statement made in a registration statement or prospectus that is part of the Registration Statement or made in a document incorporated or deemed incorporated by reference into the Registration Statement or prospectus that is part of the Registration Statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the Registration Statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided or on behalf of the undersigned Registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission

such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ SANDRA E. PIERCE</u> Sandra E. Pierce	Director	November 10, 2022
<u>/s/ JOHN F. SMITH</u> John F. Smith	Director	November 10, 2022
<u>/s/ SAMUEL VALENTI III</u> Samuel Valenti III	Director	November 10, 2022

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Detroit, State of Michigan, on November 10, 2022.

COLFOR MANUFACTURING, INC.

By: /s/ CHRISTOPHER J. MAY

Christopher J. May
Vice President & Chief Financial Officer

Each person whose signature appears below hereby constitutes and appoints Christopher J. May and David E. Barnes his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) and supplements to this Registration Statement, and to file the same, with all exhibits thereto, and other document in connection therewith, with the Securities and Exchange Commission, and hereby grants to such attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u> /s/ MICHAEL K. SIMONTE </u> Michael K. Simonte	Chairman of the Board	November 10, 2022
<u> /s/ CHRISTOPHER J. MAY </u> Christopher J. May	Director	November 10, 2022
<u> /s/ DAVID E. BARNES </u> David E. Barnes	Director	November 10, 2022

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Detroit, State of Michigan, on November 10, 2022.

JERNBERG INDUSTRIES, LLC

By: /s/ CHRISTOPHER J. MAY
 Christopher J. May
 Vice President & Chief Financial Officer

Each person whose signature appears below hereby constitutes and appoints Christopher J. May and David E. Barnes his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) and supplements to this Registration Statement, and to file the same, with all exhibits thereto, and other document in connection therewith, with the Securities and Exchange Commission, and hereby grants to such attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u> /s/ MICHAEL K. SIMONTE</u> Michael K. Simonte	Chairman of the Board	November 10, 2022
<u> /s/ CHRISTOPHER J. MAY</u> Christopher J. May	Director	November 10, 2022
<u> /s/ DAVID E. BARNES</u> David E. Barnes	Director	November 10, 2022

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Detroit, State of Michigan, on November 10, 2022.

METALDYNE M&A BLUFFTON, LLCBy: /s/ CHRISTOPHER J. MAY

Christopher J. May
Vice President & Chief Financial Officer

Each person whose signature appears below hereby constitutes and appoints Christopher J. May and David E. Barnes his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) and supplements to this Registration Statement, and to file the same, with all exhibits thereto, and other document in connection therewith, with the Securities and Exchange Commission, and hereby grants to such attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u> /s/ MICHAEL K. SIMONTE </u> Michael K. Simonte	Chairman of the Board	November 10, 2022
<u> /s/ CHRISTOPHER J. MAY </u> Christopher J. May	Director	November 10, 2022
<u> /s/ DAVID E. BARNES </u> David E. Barnes	Director	November 10, 2022

SHEARMAN & STERLING LLP

599 Lexington Avenue
New York, NY 10022-6069
+1.212.848.4000

November 10, 2022

American Axle & Manufacturing Holdings, Inc.
American Axle & Manufacturing, Inc.
One Dauch Drive
Detroit, Michigan 48211

American Axle & Manufacturing Holdings, Inc.
American Axle & Manufacturing, Inc.
Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to American Axle & Manufacturing Holdings, Inc., a Delaware corporation ("Holdings"), and American Axle & Manufacturing, Inc., a Delaware corporation ("AAM, Inc." and together with Holdings, the "Registrants"), in connection with the preparation and filing by the Registrants and the entities listed on Schedule A hereto (collectively, the "Subsidiary Guarantors") of a registration statement on Form S-3 (such registration statement, including the documents incorporated by reference therein, the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") relating to the offering from time to time, pursuant to Rule 415 of the General Rules and Regulations of the Commission promulgated under the Securities Act of 1933, as amended (the "Securities Act"), by the Registrants of (i) shares of Holdings' common stock, par value \$0.01 per share ("Common Stock"), (ii) shares of Holdings' preferred stock, par value \$0.01 per share ("Holdings Preferred Stock"), (iii) shares of AAM, Inc.'s preferred stock, par value \$0.01 per share ("AAM, Inc. Preferred Stock" and together with the Holdings Preferred Stock, the "Preferred Stock"), (iv) debt securities of AAM, Inc. ("Debt Securities"), (v) guarantees of such Debt Securities by Holdings ("Guarantees") and/or the Subsidiary Guarantors, (vi) warrants to purchase Debt Securities (the "Debt Warrants"), (vii) warrants to purchase Common Stock (the "Common Stock Warrants") and (viii) shares of Common Stock underlying the Common Stock Warrants (the "Warrant Shares"), in each case, as described in the prospectus forming a part of the Registration Statement (the "Prospectus"), as supplemented by one or more supplements to the Prospectus and as shall be designated by the Registrants at the time of the applicable offering. The Common Stock, the Preferred Stock, the Debt Securities, the Guarantees, the Debt Warrants and the Common Stock Warrants are hereinafter referred to, collectively, as the "Securities."

The Debt Securities and the Guarantees will be issued in one or more series pursuant to an indenture dated as of November 3, 2011, among AAM, Inc., as issuer, Holdings, as guarantor, certain subsidiary guarantors and U.S. Bank National Association, as trustee (the “Trustee”), as supplemented by the First Supplemental Indenture, dated as of March 23, 2017, the Second Supplemental Indenture, dated as of May 17, 2017 and the Third Supplemental Indenture, dated as of March 23, 2018 (collectively, the “Indenture”). The Preferred Stock will be issued in one or more series and the relative powers, designation, preferences, rights and qualifications, limitations or restrictions of such Preferred Stock will be set forth in one or more certificates of designation (each, a “Certificate of Designation”). Each Certificate of Designation will be in a form to be filed as an exhibit to a post-effective amendment to the Registration Statement or a Current Report on Form 8-K incorporated in such Registration Statement by reference. The Debt Warrants will be issued pursuant to a warrant agreement (each, a “Debt Warrant Agreement”) to be entered into between AAM, Inc. and a bank or trust company, as warrant agent (each, a “Debt Warrant Agent”). The Common Stock Warrants will be issued pursuant to a warrant agreement (each, a “Common Stock Warrant Agreement”) to be entered into between Holdings and a bank or trust company, as warrant agent (each, a “Common Stock Warrant Agent”). Each Debt Warrant Agreement and Common Stock Warrant Agreement will be in a form to be filed as an exhibit to a post-effective amendment to the Registration Statement or a Current Report on Form 8-K incorporated in such Registration Statement by reference.

In that connection, we have reviewed the originals, or copies identified to our satisfaction, of the Indenture, the Registration Statement, the Prospectus, the certificates of incorporation and by-laws of the Registrants, as amended, and such corporate records of the Registrants, certificates of public officials, officers of the Registrants and other persons, and other documents, agreements and instruments, as we have deemed necessary as a basis for the opinions expressed below. In our review, we have assumed the genuineness of all signatures, the authenticity of the originals of the documents submitted to us and the conformity to authentic originals of any documents submitted to us as copies. We have further assumed, as to matters of fact, the truthfulness of the representations made in certificates of public officials and officers of the Registrants; and that the Indenture is the legal, valid and binding obligation of each party thereto, other than the Registrants, enforceable against each such party in accordance with its terms.

Our opinion set forth below is limited to the law of the State of New York and the General Corporation Law of the State of Delaware (“DGCL”), and we do not express any opinion herein concerning any other law.

Based upon the foregoing, and upon such other investigation as we have deemed necessary and subject to the qualifications set forth below, we are of the opinion that:

1. The Indenture has been authorized, executed and delivered by the Registrants, and is the valid and binding obligation of the Registrants, enforceable against the Registrants in accordance with its terms.
2. When (i) the final terms of the Debt Securities have been duly established and approved by AAM, Inc.; (ii) the issuance and sale of the Debt Securities (including the Guarantees endorsed thereon) are duly authorized by all necessary action (corporate or otherwise); and (iii) such Debt Securities (including the Guarantees endorsed thereon) are duly executed by the Registrants and duly authenticated by the Trustee in accordance with the terms of the Indenture, and delivered to the purchasers thereof against payment of the consideration therefor duly approved by AAM, Inc., the Debt Securities and the Guarantees endorsed thereon will constitute legal, valid and binding obligations of the Registrants, enforceable against the Registrants in accordance with their terms.

3. When (i) the terms of issuance and sale of the shares of Common Stock have been duly approved by Holdings in conformity with the DGCL and Holdings' certificate of incorporation, and (ii) the shares of Common Stock are issued and delivered to the purchasers thereof against payment of the consideration therefor duly approved by Holdings (which shall not be less than the par value of the Common Stock), the shares of Common Stock, will be duly authorized, validly issued, fully paid and non-assessable.

4. When (i) the terms of the Preferred Stock have been established and approved by either AAM, Inc. or Holdings, as the case may be, in conformity with the DGCL and AAM, Inc.'s or Holdings' respective certificates of incorporation, as applicable; (ii) all corporate action necessary for the issuance and sale of the shares of Preferred Stock is taken, including the adoption and filing of the Certificate of Designations relating thereto; and (iii) the shares of the Preferred Stock are issued and delivered to the purchasers thereof against payment of the consideration therefor duly approved by AAM, Inc. or Holdings, as the case may be, (which shall not be less than the par value of the Preferred Stock), the shares of Preferred Stock will be duly authorized, validly issued, fully paid and non-assessable.

5. When (i) the terms of the Common Stock Warrants have been established and approved by Holdings; (ii) all corporate action necessary for the issuance and sale of the Common Stock Warrants is taken, including the adoption of a Common Stock Warrant Agreement relating thereto; (iii) the Common Stock Warrants or certificates representing the Common Stock Warrants are duly executed by Holdings, and such certificates have been countersigned by the applicable Common Stock Warrant Agent in accordance with the applicable Common Stock Warrant Agreement; and (iv) the Common Stock Warrants or certificates representing the Common Stock Warrants are issued and delivered to the purchasers thereof against payment of the consideration thereof duly approved by Holdings, the Common Stock Warrants will constitute valid and legally binding obligations of Holdings, entitled to the benefits of the applicable Common Stock Warrant Agreement.

6. When (i) the terms of the Debt Warrants have been established and approved by AAM, Inc.; (ii) all corporate action necessary for the issuance and sale of the Debt Warrants is taken, including the adoption of a Debt Warrant Agreement relating thereto; (iii) the Debt Warrants or certificates representing the Debt Warrants are duly executed by AAM, Inc., and such certificates have been countersigned by the applicable Debt Warrant Agent in accordance with the applicable Debt Warrant Agreement; and (iv) the Debt Warrants or certificates representing the Debt Warrants are issued and delivered to the purchasers thereof against payment of the consideration thereof duly approved by AAM, Inc., the Debt Warrants will constitute valid and legally binding obligations of AAM, Inc. entitled to the benefits of the applicable Debt Warrant Agreement.

7. When the Warrant Shares to be offered and issued by Holdings upon exercise of the Common Stock Warrants have been duly approved by Holdings in conformity with the DGCL and Holdings' certificate of incorporation and, when issued by Holdings against payment in full of the consideration (which shall not be less than the par value of the Common Stock) and in accordance with the Common Stock Warrant, the Warrant Shares will be duly authorized, validly issued, fully paid and non-assessable.

The opinions set forth above are subject to (i) the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally (including without limitation all laws relating to fraudulent transfers), and (ii) the effect of general principles of equity, including without limitation concepts of materiality, reasonableness, good faith and fair dealing (regardless of whether considered in a proceeding in equity or at law). Further, with respect to Securities denominated in a currency other than United States dollars, if any, we express no opinion as to whether a court would award a judgment in a currency other than United States dollars.

We understand that this opinion is to be used in connection with the Registration Statement. We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the use of our name in the Prospectus under the caption "Legal Matters." In giving this consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Shearman & Sterling LLP

RA/im/km

EL

Schedule A
Subsidiary Guarantors

NAME	Jurisdiction of Incorporation
AAM Casting Corp.	Delaware
AAM International Holdings, Inc.	Delaware
AAM Powder Metal Components, Inc.	Ohio
AccuGear, Inc.	Delaware
ASP Grede Intermediate Holdings LLC	Delaware
ASP HHI Holdings, Inc.	Delaware
Auburn Hills Manufacturing, Inc.	Delaware
Colfor Manufacturing, Inc.	Delaware
HHI FormTech, LLC	Delaware
Impact Forge Group, LLC	Delaware
Jernberg Industries, LLC	Delaware
MD Investors Corporation	Delaware
Metaldyne M&A Bluffton, LLC	Delaware
Metaldyne Performance Group, Inc.	Delaware
Metaldyne Powertrain Components, Inc.	Delaware
Metaldyne Sintered Ridgway, LLC	Delaware
Metaldyne SinterForged Products, LLC	Delaware
MSP Industries Corporation	Michigan
Oxford Forge, Inc.	Delaware
Punchcraft Machining and Tooling, LLC	Delaware
Tekfor, Inc.	Delaware

November 10, 2022

American Axle & Manufacturing Holdings, Inc.
American Axle & Manufacturing, Inc.
One Dauch Drive
Detroit, Michigan 48211

American Axle & Manufacturing Holdings, Inc.
American Axle & Manufacturing, Inc.
Registration Statement on Form S-3

Ladies and Gentlemen:

Reference is made to the registration statement on Form S-3ASR (the "Registration Statement") being filed with the Securities and Exchange Commission (the "Commission") on or about November 10, 2022 by American Axle & Manufacturing Holdings, Inc., a Delaware corporation ("Holdings"), American Axle & Manufacturing, Inc., a Delaware corporation ("AAM, Inc.") and the entities listed on Schedule A hereto (collectively, the "Subsidiary Guarantors") and, together with Holdings and AAM, Inc., the "Registrants"). The Registration Statement relates to the issuance and sale from time to time, pursuant to Rule 415 of the General Rules and Regulations promulgated under the Securities Act of 1933, as amended (the "Securities Act"), by the Registrants of (i) shares of Holdings' common stock, par value \$0.01 per share ("Common Stock"), (ii) shares of Holdings' preferred stock, par value \$.01 per share ("Holdings Preferred Stock"), (iii) shares of AAM, Inc.'s preferred stock, par value \$.01 per share ("AAM, Inc. Preferred Stock") and, together with the Holdings Preferred Stock, the "Preferred Stock", (iv) debt securities of AAM, Inc. ("Debt Securities"), (v) guarantees of such Debt Securities by Holdings ("Holdings' Guarantee") and/or the Subsidiary Guarantors ("Subsidiary Guarantees") and, together with Holdings' Guarantee, the "Guarantees", (vi) warrants to purchase Debt Securities (the "Debt Warrants"), (vii) warrants to purchase Common Stock (the "Common Stock Warrants") and (viii) shares of Common Stock underlying the Common Stock Warrants (the "Warrant Shares"), in each case, as described in the prospectus forming a part of the Registration Statement (the "Prospectus"), as supplemented by one or more supplements to the Prospectus and as shall be designated by the Registrants at the time of the applicable offering. The Common Stock, the Preferred Stock, the Debt Securities, the Guarantees, the Debt Warrants and the Common Stock Warrants are hereinafter referred to, collectively, as the "Securities."

The Debt Securities and the Guarantees will be issued pursuant to an indenture, dated as of November 3, 2011, among AAM, Inc., as issuer, Holdings, as guarantor, certain subsidiary guarantors and U.S. Bank National Association, as trustee (the "Trustee"), which has been filed as Exhibit 4.1 to the Form 8-K filed by Holdings on November 3, 2011, as amended by the First Supplemental Indenture, dated as of March 23, 2017 which has been filed as Exhibit 4.1 to the Form 8-K filed by Holdings on March 23, 2017, the Second Supplemental Indenture, dated as of May 17, 2017 which has been filed as Exhibit 4.1 to the Form 8-K filed by Holdings on May 17, 2017 and the Third Supplemental Indenture, dated as of March 23, 2018 which has been filed as Exhibit 4.1 to the Form 8-K filed by Holdings on March 26, 2018 (collectively, the "Indenture").

As General Counsel of Holdings and AAM, Inc., the direct parent company of each Subsidiary Guarantor, and Secretary of each Subsidiary Guarantor, I am familiar with the incorporation documents and bylaws of each Subsidiary Guarantor and with the affairs of each Subsidiary Guarantor. In rendering the opinions set forth below, I have examined or caused to be examined such agreements, documents, instruments and records as I deemed necessary or appropriate under the circumstances for me to express such opinions. In rendering such opinions, I also have assumed that:

- (i) the Indenture has been duly authorized, executed and delivered by the Trustee; and
- (ii) prior to the offering and sale of Debt Securities, the respective officers of the Registrants duly authorized by each Registrant's Board of Directors or a committee thereof will authorize by proper corporate action the terms of and the prices at which the Debt Securities (including the Guarantees endorsed thereon) are to be issued and sold pursuant to the terms of the Indenture.

With regard to the opinions set forth below, insofar as they relate to the Subsidiary Guarantees as valid, binding and enforceable obligations of each Subsidiary Guarantor, I have relied solely upon an opinion letter dated the date hereof from Shearman & Sterling LLP, New York, New York, with respect to all matters of New York law related thereto. Based on the foregoing, and subject to the assumptions and qualifications set forth above, it is my opinion that the Subsidiary Guarantees, when duly executed by the Subsidiary Guarantors and authenticated by the Trustee in accordance with the Indenture and delivered to and paid for by the purchasers thereof, will be legally issued and will constitute valid and binding obligations of the Subsidiary Guarantors, enforceable against each Subsidiary Guarantor in accordance with their terms and entitled to the benefits of the Indenture, except to the extent that the enforcement thereof may be limited by (A) bankruptcy, insolvency, reorganization, moratorium and other laws now or hereafter in effect relating to creditors' rights generally and (B) general principles of equity (regardless of whether enforcement is considered in a proceeding at law or in equity).

I hereby consent to the filing of this opinion as an exhibit to the Registration Statement, and I hereby consent to the reference made to me under the heading "Legal Matters" set forth in the prospectus forming a part of the Registration Statement. In giving such consent, I do not thereby admit that I am in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Sincerely yours,

/s/ David E. Barnes

David E. Barnes

Vice President, General Counsel & Secretary

[Signature Page to Opinion of General Counsel]

Schedule A
Subsidiary Guarantors

NAME	Jurisdiction of Incorporation
AAM Casting Corp.	Delaware
AAM International Holdings, Inc.	Delaware
AAM Powder Metal Components, Inc.	Ohio
AccuGear, Inc.	Delaware
ASP Grede Intermediate Holdings LLC	Delaware
ASP HHI Holdings, Inc.	Delaware
Auburn Hills Manufacturing, Inc.	Delaware
Colfor Manufacturing, Inc.	Delaware
HHI FormTech, LLC	Delaware
Impact Forge Group, LLC	Delaware
Jernberg Industries, LLC	Delaware
MD Investors Corporation	Delaware
Metaldyne M&A Bluffton, LLC	Delaware
Metaldyne Performance Group, Inc.	Delaware
Metaldyne Powertrain Components, Inc.	Delaware
Metaldyne Sintered Ridgway, LLC	Delaware
Metaldyne SinterForged Products, LLC	Delaware
MSP Industries Corporation	Michigan
Oxford Forge, Inc.	Delaware
Punchcraft Machining and Tooling, LLC	Delaware
Tekfor, Inc.	Delaware

Schedule A

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated February 11, 2022 relating to the consolidated financial statements, and the related financial statement schedule, of American Axle & Manufacturing Holdings, Inc. and the effectiveness of American Axle & Manufacturing Holdings, Inc.'s internal control over financial reporting, appearing in the Annual Report on Form 10-K of American Axle & Manufacturing Holdings, Inc. for the year ended December 31, 2021. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Deloitte & Touche LLP
Detroit, MI

November 10, 2022

SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

FORM T-1

**STATEMENT OF ELIGIBILITY UNDER
 THE TRUST INDENTURE ACT OF 1939 OF A
 CORPORATION DESIGNATED TO ACT AS TRUSTEE**

Check if an Application to Determine Eligibility of
 a Trustee Pursuant to Section 305(b)(2)

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION

(Exact name of Trustee as specified in its charter)

91-1821036

I.R.S. Employer Identification No.

800 Nicollet Mall Minneapolis, Minnesota	55402
(Address of principal executive offices)	(Zip Code)

James Kowalski
 U.S. Bank Trust Company, National Association
 535 Griswold Street, Suite 550
 Detroit, MI 48226
 (313) 234-4716
 (Name, address and telephone number of agent for service)

American Axle & Manufacturing, Inc.
 (Issuer with respect to the Securities)

Delaware	38-3138388
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

One Dauch Drive Detroit, Michigan	48221
(Address of Principal Executive Offices)	(Zip Code)

Debt Securities
 (Title of the Indenture Securities)

FORM T-1

Item 1. GENERAL INFORMATION. Furnish the following information as to the Trustee.

a) *Name and address of each examining or supervising authority to which it is subject.*

Comptroller of the Currency
Washington, D.C.

b) *Whether it is authorized to exercise corporate trust powers.*

Yes

Item 2. AFFILIATIONS WITH THE OBLIGOR. *If the obligor is an affiliate of the Trustee, describe each such affiliation.*

None

Items 3-15 *Items 3-15 are not applicable because to the best of the Trustee's knowledge, the obligor is not in default under any Indenture for which the Trustee acts as Trustee.*

Item 16. LIST OF EXHIBITS: *List below all exhibits filed as a part of this statement of eligibility and qualification.*

1. A copy of the Articles of Association of the Trustee, attached as Exhibit 1.
 2. A copy of the certificate of authority of the Trustee to commence business and exercise corporate trust powers, attached as Exhibit 2.
 3. A copy of the existing bylaws of the Trustee, attached as Exhibit 3.
 4. A copy of each Indenture referred to in Item 4. Not applicable.
 5. The consent of the Trustee required by Section 321(b) of the Trust Indenture Act of 1939, attached as Exhibit 5.
 6. Report of Condition of the Trustee as of June 30, 2022, published pursuant to law or the requirements of its supervising or examining authority, attached as Exhibit 6.
-

SIGNATURE

Pursuant to the requirements of the Trust Indenture Act of 1939, as amended, the Trustee, U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, a national banking association organized and existing under the laws of the United States of America, has duly caused this statement of eligibility and qualification to be signed on its behalf by the undersigned, thereunto duly authorized, all in the City of Detroit, State of Michigan on the 10th of November, 2022.

By: /s/ James Kowalski

James Kowalski

Vice President

Exhibit 1

**ARTICLES OF ASSOCIATION
OF
U. S. BANK TRUST COMPANY, NATIONAL ASSOCIATION**

For the purpose of organizing an association (the "Association") to perform any lawful activities of national banks, the undersigned enter into the following Articles of Association:

FIRST. The title of this Association shall be U. S. Bank Trust Company, National Association.

SECOND. The main office of the Association shall be in the city of Portland, county of Multnomah, state of Oregon. The business of the Association will be limited to fiduciary powers and the support of activities incidental to the exercise of those powers. The Association may not expand or alter its business beyond that stated in this article without the prior approval of the Comptroller of the Currency.

THIRD. The board of directors of the Association shall consist of not less than five nor more than twenty-five persons, the exact number to be fixed and determined from time to time by resolution of a majority of the full board of directors or by resolution of a majority of the shareholders at any annual or special meeting thereof. Each director shall own common or preferred stock of the Association or of a holding company owning the Association, with an aggregate par, fair market, or equity value of not less than \$1,000, as of either (i) the date of purchase, (ii) the date the person became a director, or (iii) the date of that person's most recent election to the board of directors, whichever is more recent. Any combination of common or preferred stock of the Association or holding company may be used.

Any vacancy in the board of directors may be filled by action of a majority of the remaining directors between meetings of shareholders. The board of directors may increase the number of directors up to the maximum permitted by law. Terms of directors, including directors selected to fill vacancies, shall expire at the next regular meeting of shareholders at which directors are elected, unless the directors resign or are removed from office. Despite the expiration of a director's term, the director shall continue to serve until his or her successor is elected and qualified or until there is a decrease in the number of directors and his or her position is eliminated.

Honorary or advisory members of the board of directors, without voting power or power of final decision in matters concerning the business of the Association, may be appointed by resolution of a majority of the full board of directors, or by resolution of shareholders at any annual or special meeting. Honorary or advisory directors shall not be counted to determine the number of directors of the Association or the presence of a quorum in connection with any board action, and shall not be required to own qualifying shares.

FOURTH. There shall be an annual meeting of the shareholders to elect directors and transact whatever other business may be brought before the meeting. It shall be held at the main office or any other convenient place the board of directors may designate, on the day of each year specified therefor in the Bylaws, or if that day falls on a legal holiday in the state in which the Association is located, on the next following banking day. If no election is held on the day fixed or in the event of a legal holiday on the following banking day, an election may be held on any subsequent day within 60 days of the day fixed, to be designated by the board of directors, or, if the directors fail to fix the day, by shareholders representing two-thirds of the shares issued and outstanding. In all cases, at least 10 days' advance notice of the meeting shall be given to the shareholders by first-class mail.

In all elections of directors, the number of votes each common shareholder may cast will be determined by multiplying the number of shares he or she owns by the number of directors to be elected. Those votes may be cumulated and cast for a single candidate or may be distributed among two or more candidates in the manner selected by the shareholder. On all other questions, each common shareholder shall be entitled to one vote for each share of stock held by him or her.

A director may resign at any time by delivering written notice to the board of directors, its chairperson, or to the Association, which resignation shall be effective when the notice is delivered unless the notice specifies a later effective date.

A director may be removed by the shareholders at a meeting called to remove him or her, when notice of the meeting stating that the purpose or one of the purposes is to remove him or her is provided, if there is a failure to fulfill one of the affirmative requirements for qualification, or for cause; provided, however, that a director may not be removed if the number of votes sufficient to elect him or her under cumulative voting is voted against his or her removal.

FIFTH. The authorized amount of capital stock of the Association shall be 1,000,000 shares of common stock of the par value of ten dollars (\$10) each; but said capital stock may be increased or decreased from time to time, according to the provisions of the laws of the United States. The Association shall have only one class of capital stock.

No holder of shares of the capital stock of any class of the Association shall have any preemptive or preferential right of subscription to any shares of any class of stock of the Association, whether now or hereafter authorized, or to any obligations convertible into stock of the Association, issued, or sold, nor any right of subscription to any thereof other than such, if any, as the board of directors, in its discretion, may from time to time determine and at such price as the board of directors may from time to time fix.

Transfers of the Association's stock are subject to the prior written approval of a federal depository institution regulatory agency. If no other agency approval is required, the approval of the Comptroller of the Currency must be obtained prior to any such transfers.

Unless otherwise specified in the Articles of Association or required by law, (1) all matters requiring shareholder action, including amendments to the Articles of Association must be approved by shareholders owning a majority voting interest in the outstanding voting stock, and (2) each shareholder shall be entitled to one vote per share.

Unless otherwise specified in the Articles of Association or required by law, all shares of voting stock shall be voted together as a class, on any matters requiring shareholder approval.

Unless otherwise provided in the Bylaws, the record date for determining shareholders entitled to notice of and to vote at any meeting is the close of business on the day before the first notice is mailed or otherwise sent to the shareholders, provided that in no event may a record date be more than 70 days before the meeting.

The Association, at any time and from time to time, may authorize and issue debt obligations, whether subordinated, without the approval of the shareholders. Obligations classified as debt, whether subordinated, which may be issued by the Association without the approval of shareholders, do not carry voting rights on any issue, including an increase or decrease in the aggregate number of the securities, or the exchange or reclassification of all or part of securities into securities of another class or series.

SIXTH. The board of directors shall appoint one of its members president of this Association and one of its members chairperson of the board and shall have the power to appoint one or more vice presidents, a secretary who shall keep minutes of the directors' and shareholders' meetings and be responsible for authenticating the records of the Association, and such other officers and employees as may be required to transact the business of this Association. A duly appointed officer may appoint one or more officers or assistant officers if authorized by the board of directors in accordance with the Bylaws.

The board of directors shall have the power to:

- (1) Define the duties of the officers, employees, and agents of the Association.
- (2) Delegate the performance of its duties, but not the responsibility for its duties, to the officers, employees, and agents of the Association.
- (3) Fix the compensation and enter employment contracts with its officers and employees upon reasonable terms and conditions consistent with applicable law.
- (4) Dismiss officers and employees.
- (5) Require bonds from officers and employees and to fix the penalty thereof.
- (6) Ratify written policies authorized by the Association's management or committees of the board.
- (7) Regulate the manner any increase or decrease of the capital of the Association shall be made; provided that nothing herein shall restrict the power of shareholders to increase or decrease the capital of the Association in accordance with law, and nothing shall raise or lower from two-thirds the percentage required for shareholder approval to increase or reduce the capital.

- (8) Manage and administer the business and affairs of the Association.
- (9) Adopt initial Bylaws, not inconsistent with law or the Articles of Association, for managing the business and regulating the affairs of the Association.
- (10) Amend or repeal Bylaws, except to the extent that the Articles of Association reserve this power in whole or in part to the shareholders.
- (11) Make contracts.
- (12) Generally perform all acts that are legal for a board of directors to perform.

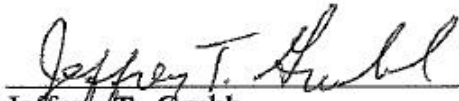
SEVENTH. The board of directors shall have the power to change the location of the main office to any authorized branch within the limits of the city of Portland, Oregon, without the approval of the shareholders, or with a vote of shareholders owning two-thirds of the stock of the Association for a location outside such limits and upon receipt of a certificate of approval from the Comptroller of the Currency, to any other location within or outside the limits of the city of Portland, Oregon, but not more than thirty miles beyond such limits. The board of directors shall have the power to establish or change the location of any office or offices of the Association to any other location permitted under applicable law, without approval of shareholders, subject to approval by the Comptroller of the Currency.

EIGHTH. The corporate existence of this Association shall continue until termination according to the laws of the United States.

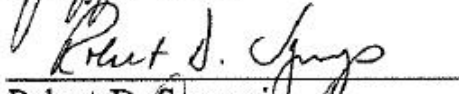
NINTH. The board of directors of the Association, or any shareholder owning, in the aggregate, not less than 25 percent of the stock of the Association, may call a special meeting of shareholders at any time. Unless otherwise provided by the Bylaws or the laws of the United States, or waived by shareholders, a notice of the time, place, and purpose of every annual and special meeting of the shareholders shall be given by first-class mail, postage prepaid, mailed at least 10, and no more than 60, days prior to the date of the meeting to each shareholder of record at his/her address as shown upon the books of the Association. Unless otherwise provided by the Bylaws, any action requiring approval of shareholders must be effected at a duly called annual or special meeting.

TENTH. These Articles of Association may be amended at any regular or special meeting of the shareholders by the affirmative vote of the holders of a majority of the stock of the Association, unless the vote of the holders of a greater amount of stock is required by law, and in that case by the vote of the holders of such greater amount; provided, that the scope of the Association's activities and services may not be expanded without the prior written approval of the Comptroller of the Currency. The Association's board of directors may propose one or more amendments to the Articles of Association for submission to the shareholders.

In witness whereof, we have hereunto set our hands this 11th of June, 1997.



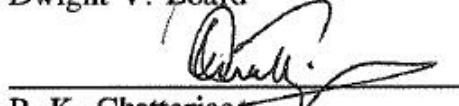
Jeffrey T. Grubb



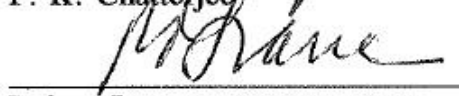
Robert D. Szniewajski



Dwight V. Board



P. K. Chatterjee



Robert Lane

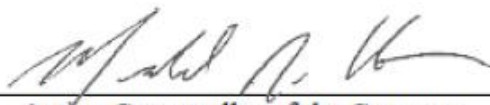


CERTIFICATE OF CORPORATE EXISTENCE AND FIDUCIARY POWERS

I, Michael J. Hsu, Acting Comptroller of the Currency, do hereby certify that:

1. The Comptroller of the Currency, pursuant to Revised Statutes 324, et seq, as amended, and 12 USC 1, et seq, as amended, has possession, custody, and control of all records pertaining to the chartering, regulation, and supervision of all national banking associations.
2. "U.S. Bank Trust Company, National Association," Portland, Oregon (Charter No. 23412), is a national banking association formed under the laws of the United States and is authorized thereunder to transact the business of banking and exercise fiduciary powers on the date of this certificate.

IN TESTIMONY WHEREOF, today, July 5, 2022, I have hereunto subscribed my name and caused my seal of office to be affixed to these presents at the U.S. Department of the Treasury, in the City of Washington, District of Columbia.



Acting Comptroller of the Currency



Exhibit 3

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION

AMENDED AND RESTATED BYLAWS

ARTICLE I

Meetings of Shareholders

Section 1.1. Annual Meeting. The annual meeting of the shareholders, for the election of directors and the transaction of any other proper business, shall be held at a time and place as the Chairman or President may designate. Notice of such meeting shall be given not less than ten (10) days or more than sixty (60) days prior to the date thereof, to each shareholder of the Association, unless the Office of the Comptroller of the Currency (the "OCC") determines that an emergency circumstance exists. In accordance with applicable law, the sole shareholder of the Association is permitted to waive notice of the meeting. If, for any reason, an election of directors is not made on the designated day, the election shall be held on some subsequent day, as soon thereafter as practicable, with prior notice thereof. Failure to hold an annual meeting as required by these Bylaws shall not affect the validity of any corporate action or work a forfeiture or dissolution of the Association.

Section 1.2. Special Meetings. Except as otherwise specially provided by law, special meetings of the shareholders may be called for any purpose, at any time by a majority of the board of directors (the "Board"), or by any shareholder or group of shareholders owning at least ten percent of the outstanding stock.

Every such special meeting, unless otherwise provided by law, shall be called upon not less than ten (10) days nor more than sixty (60) days prior notice stating the purpose of the meeting.

Section 1.3. Nominations for Directors. Nominations for election to the Board may be made by the Board or by any shareholder.

Section 1.4. Proxies. Shareholders may vote at any meeting of the shareholders by proxies duly authorized in writing. Proxies shall be valid only for one meeting and any adjournments of such meeting and shall be filed with the records of the meeting.

Section 1.5. Record Date. The record date for determining shareholders entitled to notice and to vote at any meeting will be thirty days before the date of such meeting, unless otherwise determined by the Board.

Section 1.6. Quorum and Voting. A majority of the outstanding capital stock, represented in person or by proxy, shall constitute a quorum at any meeting of shareholders, unless otherwise provided by law, but less than a quorum may adjourn any meeting, from time to time, and the meeting may be held as adjourned without further notice. A majority of the votes cast shall decide every question or matter submitted to the shareholders at any meeting, unless otherwise provided by law or by the Articles of Association.

Section 1.7. Inspectors. The Board may, and in the event of its failure so to do, the Chairman of the Board may appoint Inspectors of Election who shall determine the presence of quorum, the validity of proxies, and the results of all elections and all other matters voted upon by shareholders at all annual and special meetings of shareholders.

Section 1.8. Waiver and Consent. The shareholders may act without notice or a meeting by a unanimous written consent by all shareholders.

Section 1.9. Remote Meetings. The Board shall have the right to determine that a shareholder meeting not be held at a place, but instead be held solely by means of remote communication in the manner and to the extent permitted by the General Corporation Law of the State of Delaware.

ARTICLE II Directors

Section 2.1. Board of Directors. The Board shall have the power to manage and administer the business and affairs of the Association. Except as expressly limited by law, all corporate powers of the Association shall be vested in and may be exercised by the Board.

Section 2.2. Term of Office. The directors of this Association shall hold office for one year and until their successors are duly elected and qualified, or until their earlier resignation or removal.

Section 2.3. Powers. In addition to the foregoing, the Board shall have and may exercise all of the powers granted to or conferred upon it by the Articles of Association, the Bylaws and by law.

Section 2.4. Number. As provided in the Articles of Association, the Board of this Association shall consist of no less than five nor more than twenty-five members, unless the OCC has exempted the Association from the twenty-five-member limit. The Board shall consist of a number of members to be fixed and determined from time to time by resolution of the Board or the shareholders at any meeting thereof, in accordance with the Articles of Association. Between meetings of the shareholders held for the purpose of electing directors, the Board by a majority vote of the full Board may increase the size of the Board but not to more than a total of twenty-five directors, and fill any vacancy so created in the Board; provided that the Board may increase the number of directors only by up to two directors, when the number of directors last elected by shareholders was fifteen or fewer, and by up to four directors, when the number of directors last elected by shareholders was sixteen or more. Each director shall own a qualifying equity interest in the Association or a company that has control of the Association in each case as required by applicable law. Each director shall own such qualifying equity interest in his or her own right and meet any minimum threshold ownership required by applicable law.

Section 2.5. Organization Meeting. The newly elected Board shall meet for the purpose of organizing the new Board and electing and appointing such officers of the Association as may be appropriate. Such meeting shall be held on the day of the election or as soon thereafter as practicable, and, in any event, within thirty days thereafter, at such time and place as the Chairman or President may designate. If, at the time fixed for such meeting, there shall not be a quorum present, the directors present may adjourn the meeting until a quorum is obtained.

Section 2.6. Regular Meetings. The regular meetings of the Board shall be held, without notice, as the Chairman or President may designate and deem suitable.

Section 2.7. Special Meetings. Special meetings of the Board may be called at any time, at any place and for any purpose by the Chairman of the Board or the President of the Association, or upon the request of a majority of the entire Board. Notice of every special meeting of the Board shall be given to the directors at their usual places of business, or at such other addresses as shall have been furnished by them for the purpose. Such notice shall be given at least twelve hours (three hours if meeting is to be conducted by conference telephone) before the meeting by telephone or by being personally delivered, mailed, or electronically delivered. Such notice need not include a statement of the business to be transacted at, or the purpose of, any such meeting.

Section 2.8. Quorum and Necessary Vote. A majority of the directors shall constitute a quorum at any meeting of the Board, except when otherwise provided by law; but less than a quorum may adjourn any meeting, from time to time, and the meeting may be held as adjourned without further notice. Unless otherwise provided by law or the Articles or Bylaws of this Association, once a quorum is established, any act by a majority of those directors present and voting shall be the act of the Board.

Section 2.9. Written Consent. Except as otherwise required by applicable laws and regulations, the Board may act without a meeting by a unanimous written consent by all directors, to be filed with the Secretary of the Association as part of the corporate records.

Section 2.10. Remote Meetings. Members of the Board, or of any committee thereof, may participate in a meeting of such Board or committee by means of conference telephone, video or similar communications equipment by means of which all persons participating in the meeting can hear each other and such participation shall constitute presence in person at such meeting.

Section 2.11. Vacancies. When any vacancy occurs among the directors, the remaining members of the Board may appoint a director to fill such vacancy at any regular meeting of the Board, or at a special meeting called for that purpose.

ARTICLE III Committees

Section 3.1. Advisory Board of Directors. The Board may appoint persons, who need not be directors, to serve as advisory directors on an advisory board of directors established with respect to the business affairs of either this Association alone or the business affairs of a group of affiliated organizations of which this Association is one. Advisory directors shall have such powers and duties as may be determined by the Board, provided, that the Board's responsibility for the business and affairs of this Association shall in no respect be delegated or diminished.

Section 3.2. Trust Audit Committee. At least once during each calendar year, the Association shall arrange for a suitable audit (by internal or external auditors) of all significant fiduciary activities under the direction of its trust audit committee, a function that will be fulfilled by the Audit Committee of the financial holding company that is the ultimate parent of this Association. The Association shall note the results of the audit (including significant actions taken as a result of the audit) in the minutes of the Board. In lieu of annual audits, the Association may adopt a continuous audit system in accordance with 12 C.F.R. § 9.9(b).

The Audit Committee of the financial holding company that is the ultimate parent of this Association, fulfilling the function of the trust audit committee:

- (1) Must not include any officers of the Association or an affiliate who participate significantly in the administration of the Association's fiduciary activities; and
- (2) Must consist of a majority of members who are not also members of any committee to which the Board has delegated power to manage and control the fiduciary activities of the Association.

Section 3.3. Executive Committee. The Board may appoint an Executive Committee which shall consist of at least three directors and which shall have, and may exercise, to the extent permitted by applicable law, all the powers of the Board between meetings of the Board or otherwise when the Board is not meeting.

Section 3.4. Trust Management Committee. The Board of this Association shall appoint a Trust Management Committee to provide oversight of the fiduciary activities of the Association. The Trust Management Committee shall determine policies governing fiduciary activities. The Trust Management Committee or such sub-committees, officers or others as may be duly designated by the Trust Management Committee shall oversee the processes related to fiduciary activities to assure conformity with fiduciary policies it establishes, including ratifying the acceptance and the closing out or relinquishment of all trusts. The Trust Management Committee will provide regular reports of its activities to the Board.

Section 3.5. Other Committees. The Board may appoint, from time to time, committees of one or more persons who need not be directors, for such purposes and with such powers as the Board may determine; however, the Board will not delegate to any committee any powers or responsibilities that it is prohibited from delegating under any law or regulation. In addition, either the Chairman or the President may appoint, from time to time, committees of one or more officers, employees, agents or other persons, for such purposes and with such powers as either the Chairman or the President deems appropriate and proper. Whether appointed by the Board, the Chairman, or the President, any such committee shall at all times be subject to the direction and control of the Board.

Section 3.6. Meetings, Minutes and Rules. An advisory board of directors and/or committee shall meet as necessary in consideration of the purpose of the advisory board of directors or committee, and shall maintain minutes in sufficient detail to indicate actions taken or recommendations made; unless required by the members, discussions, votes or other specific details need not be reported. An advisory board of directors or a committee may, in consideration of its purpose, adopt its own rules for the exercise of any of its functions or authority.

ARTICLE IV
Officers

Section 4.1. Chairman of the Board. The Board may appoint one of its members to be Chairman of the Board to serve at the pleasure of the Board. The Chairman shall supervise the carrying out of the policies adopted or approved by the Board; shall have general executive powers, as well as the specific powers conferred by these Bylaws; and shall also have and may exercise such powers and duties as from time to time may be conferred upon or assigned by the Board.

Section 4.2. President. The Board may appoint one of its members to be President of the Association. In the absence of the Chairman, the President shall preside at any meeting of the Board. The President shall have general executive powers, and shall have and may exercise any and all other powers and duties pertaining by law, regulation or practice, to the office of President, or imposed by these Bylaws. The President shall also have and may exercise such powers and duties as from time to time may be conferred or assigned by the Board.

Section 4.3. Vice President. The Board may appoint one or more Vice Presidents who shall have such powers and duties as may be assigned by the Board and to perform the duties of the President on those occasions when the President is absent, including presiding at any meeting of the Board in the absence of both the Chairman and President.

Section 4.4. Secretary. The Board shall appoint a Secretary, or other designated officer who shall be Secretary of the Board and of the Association, and shall keep accurate minutes of all meetings. The Secretary shall attend to the giving of all notices required by these Bylaws to be given; shall be custodian of the corporate seal, records, documents and papers of the Association; shall provide for the keeping of proper records of all transactions of the Association; shall, upon request, authenticate any records of the Association; shall have and may exercise any and all other powers and duties pertaining by law, regulation or practice, to the Secretary, or imposed by these Bylaws; and shall also perform such other duties as may be assigned from time to time by the Board. The Board may appoint one or more Assistant Secretaries with such powers and duties as the Board, the President or the Secretary shall from time to time determine.

Section 4.5. Other Officers. The Board may appoint, and may authorize the Chairman, the President or any other officer to appoint, any officer as from time to time may appear to the Board, the Chairman, the President or such other officer to be required or desirable to transact the business of the Association. Such officers shall exercise such powers and perform such duties as pertain to their several offices, or as may be conferred upon or assigned to them by these Bylaws, the Board, the Chairman, the President or such other authorized officer. Any person may hold two offices.

Section 4.6. Tenure of Office. The Chairman or the President and all other officers shall hold office until their respective successors are elected and qualified or until their earlier death, resignation, retirement, disqualification or removal from office, subject to the right of the Board or authorized officer to discharge any officer at any time.

ARTICLE V

Stock

Section 5.1. The Board may authorize the issuance of stock either in certificated or in uncertificated form. Certificates for shares of stock shall be in such form as the Board may from time to time prescribe. If the Board issues certificated stock, the certificate shall be signed by the President, Secretary or any other such officer as the Board so determines. Shares of stock shall be transferable on the books of the Association, and a transfer book shall be kept in which all transfers of stock shall be recorded. Every person becoming a shareholder by such transfer shall, in proportion to such person's shares, succeed to all rights of the prior holder of such shares. Each certificate of stock shall recite on its face that the stock represented thereby is transferable only upon the books of the Association properly endorsed. The Board may impose conditions upon the transfer of the stock reasonably calculated to simplify the work of the Association for stock transfers, voting at shareholder meetings, and related matters, and to protect it against fraudulent transfers.

ARTICLE VI

Corporate Seal

Section 6.1. The Association shall have no corporate seal; provided, however, that if the use of a seal is required by, or is otherwise convenient or advisable pursuant to, the laws or regulations of any jurisdiction, the following seal may be used, and the Chairman, the President, the Secretary and any Assistant Secretary shall have the authority to affix such seal:

ARTICLE VII
Miscellaneous Provisions

Section 7.1. Execution of Instruments. All agreements, checks, drafts, orders, indentures, notes, mortgages, deeds, conveyances, transfers, endorsements, assignments, certificates, declarations, receipts, discharges, releases, satisfactions, settlements, petitions, schedules, accounts, affidavits, bonds, undertakings, guarantees, proxies and other instruments or documents may be signed, countersigned, executed, acknowledged, endorsed, verified, delivered or accepted on behalf of the Association, whether in a fiduciary capacity or otherwise, by any officer of the Association, or such employee or agent as may be designated from time to time by the Board by resolution, or by the Chairman or the President by written instrument, which resolution or instrument shall be certified as in effect by the Secretary or an Assistant Secretary of the Association. The provisions of this section are supplementary to any other provision of the Articles of Association or Bylaws.

Section 7.2. Records. The Articles of Association, the Bylaws as revised or amended from time to time and the proceedings of all meetings of the shareholders, the Board, and standing committees of the Board, shall be recorded in appropriate minute books provided for the purpose. The minutes of each meeting shall be signed by the Secretary, or other officer appointed to act as Secretary of the meeting.

Section 7.3. Trust Files. There shall be maintained in the Association files all fiduciary records necessary to assure that its fiduciary responsibilities have been properly undertaken and discharged.

Section 7.4. Trust Investments. Funds held in a fiduciary capacity shall be invested according to the instrument establishing the fiduciary relationship and according to law. Where such instrument does not specify the character and class of investments to be made and does not vest in the Association a discretion in the matter, funds held pursuant to such instrument shall be invested in investments in which corporate fiduciaries may invest under law.

Section 7.5. Notice. Whenever notice is required by the Articles of Association, the Bylaws or law, such notice shall be by mail, postage prepaid, e-mail, in person, or by any other means by which such notice can reasonably be expected to be received, using the address of the person to receive such notice, or such other personal data, as may appear on the records of the Association.

Except where specified otherwise in these Bylaws, prior notice shall be proper if given not more than 30 days nor less than 10 days prior to the event for which notice is given.

ARTICLE VIII
Indemnification

Section 8.1. The Association shall indemnify such persons for such liabilities in such manner under such circumstances and to such extent as permitted by Section 145 of the Delaware General Corporation Law, as now enacted or hereafter amended. The Board may authorize the purchase and maintenance of insurance and/or the execution of individual agreements for the purpose of such indemnification, and the Association shall advance all reasonable costs and expenses (including attorneys' fees) incurred in defending any action, suit or proceeding to all persons entitled to indemnification under this Section 8.1. Such insurance shall be consistent with the requirements of 12 C.F.R. § 7.2014 and shall exclude coverage of liability for a formal order assessing civil money penalties against an institution-affiliated party, as defined at 12 U.S.C. § 1813(u).

Section 8.2. Notwithstanding Section 8.1, however, (a) any indemnification payments to an institution-affiliated party, as defined at 12 U.S.C. § 1813(u), for an administrative proceeding or civil action initiated by a federal banking agency, shall be reasonable and consistent with the requirements of 12 U.S.C. § 1828(k) and the implementing regulations thereunder; and (b) any indemnification payments and advancement of costs and expenses to an institution-affiliated party, as defined at 12 U.S.C. § 1813(u), in cases involving an administrative proceeding or civil action not initiated by a federal banking agency, shall be in accordance with Delaware General Corporation Law and consistent with safe and sound banking practices.

ARTICLE IX
Bylaws: Interpretation and Amendment

Section 9.1. These Bylaws shall be interpreted in accordance with and subject to appropriate provisions of law, and may be added to, altered, amended, or repealed, at any regular or special meeting of the Board.

Section 9.2. A copy of the Bylaws and all amendments shall at all times be kept in a convenient place at the principal office of the Association, and shall be open for inspection to all shareholders during Association hours.

ARTICLE X
Miscellaneous Provisions

Section 10.1. Fiscal Year. The fiscal year of the Association shall begin on the first day of January in each year and shall end on the thirty-first day of December following.

Section 10.2. Governing Law. This Association designates the Delaware General Corporation Law, as amended from time to time, as the governing law for its corporate governance procedures, to the extent not inconsistent with Federal banking statutes and regulations or bank safety and soundness.

(February 8, 2021)

Exhibit 5

CONSENT

In accordance with Section 321(b) of the Trust Indenture Act of 1939, the undersigned, U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION hereby consents that reports of examination of the undersigned by Federal, State, Territorial or District authorities may be furnished by such authorities to the Securities and Exchange Commission upon its request therefor.

Dated: November 10, 2022

By: /s/ James Kowalski

James Kowalski
Vice President

Exhibit 6
U.S. Bank Trust Company, National Association
Statement of Financial Condition
as of 6/30/2022

(\$000's)

	<u>6/30/2022</u>
Assets	
Cash and Balances Due From Depository Institutions	\$ 616,060
Securities	4,515
Federal Funds	0
Loans & Lease Financing Receivables	0
Fixed Assets	2,682
Intangible Assets	582,627
Other Assets	121,863
Total Assets	\$ 1,327,747
Liabilities	
Deposits	\$ 0
Fed Funds	0
Treasury Demand Notes	0
Trading Liabilities	0
Other Borrowed Money	0
Acceptances	0
Subordinated Notes and Debentures	0
Other Liabilities	95,303
Total Liabilities	\$ 95,303
Equity	
Common and Preferred Stock	200
Surplus	1,171,635
Undivided Profits	60,609
Minority Interest in Subsidiaries	0
Total Equity Capital	\$ 1,232,444
Total Liabilities and Equity Capital	\$ 1,327,747

Calculation of Filing Fee Tables

Form S-3
(Form Type)

American Axle & Manufacturing, Inc.
(Exact Name of Registrant as Specified in its Charter)

American Axle & Manufacturing Holdings, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Common stock	Rule 456(b) and Rule 457(r)	(2)	(2)	(2)	(3)	(3)				
	Equity	Preferred stock	Rule 456(b) and Rule 457(r)	(2)	(2)	(2)	(3)	(3)				
	Debt	Debt Securities	Rule 456(b) and Rule 457(r)	(2)	(2)	(2)	(3)	(3)				
	Other	Guarantees (1)	Rule 456(b) and Rule 457(r)	(2)	(2)	(2)	(3)	(3)				
	Other	Warrants to purchase debt securities, common stock	Rule 456(b) and Rule 457(r)	(2)	(2)	(2)	(3)	(3)				
Fees Previously Paid	N/A	N/A	N/A	N/A	N/A	N/A		N/A				
Carry Forward Securities												
Carry Forward Securities	N/A	N/A	N/A	N/A		N/A			N/A	N/A	N/A	N/A
	Total Offering Amounts							N/A				
	Total Fees Previously Paid							N/A				
	Total Fee Offsets							N/A				
	Net Fee Due							N/A				

- (1) No separate consideration will be received for the guarantees of debt securities. Accordingly, pursuant to Rule 457(n) of the Securities Act of 1933, as amended (the "Securities Act"), no separate filing fee is required. The guarantee of debt securities will be issued by one or more of the registrants identified in the "Table of Additional Registrants" in the Form S-3.
- (2) An unspecified aggregate initial offering price or number of the securities of each identified class is being registered as may from time to time be offered at unspecified prices. Separate consideration may or may not be received for securities that are issuable on exercise, conversion or exchange of other securities.
- (3) In accordance with Rules 456(b) and 457(r) under the Securities Act, the registrants are deferring payment of all of the registration fee and will pay the registration fee subsequently in advance or on a pay-as-you-go basis.