RYERSON

DEAR RYERSON SHAREHOLDERS:

This is my fourth shareholder letter since I became President & CEO of Ryerson in June of 2015 and while I can't say if this will be my best shareholder letter, I can tell you this letter will be about our best performance in more than a decade and that our path forward is bright. As it has been said and sung, "To everything (turn, turn, turn), there is a season (turn, turn, turn)," and although that happens to be our perpetual inventory anthem, it also happens to underscore a place of arrival: the beginning of a season to turn down our leverage and strengthen our balance sheet from a position of operational and earnings strength. It is a point of embarkment as we begin a journey in earnest to reduce our debt and affect a desired enterprise value shift from debt to equity over the next several years. Because of the outstanding work done by my Ryerson teammates in 2018, which further built upon the work done over the past decade, we believe our transformation has reached a significant tipping point where we have a sustainable business model that can deliver profitability and improved cash flows to move us beyond incrementally better financial oscillations to much more meaningful strides in growing shareholder value through the business cycle.

But first, a quick retrospective as we did not arrive here by accident. By way of recent history, in our 2015 and 2016 Shareholder Letters we discussed a culture change and ongoing business model transformation amidst the most trying industry conditions since 2009. During 2015 and 2016, our industry lost approximately 30% of its revenue from both price deflation and volume declines, primarily due to a significant economic slowdown in China and a drop in oil prices from more than \$100 per barrel to less than \$40 per barrel. During this period, Ryerson kept moving forward despite the harsh business conditions marked by extreme commodity volatility and recessed demand. In fact, during that time we generated significant countercyclical cash flows, refinanced our debt and sold equity to further reduce leverage. We further raised performance baselines with higher gross margins, excluding LIFO, and improved expense management and asset efficiency.

In 2017, the industry began clawing back volume and attained some measure of price recovery. Ryerson recognized opportunities to grow as we completed two value-added acquisitions that enhanced our processing capabilities, and we continued to make investments in our systems to create great customer experiences through our network of intelligent service centers. During 2017, margins were challenged as imports in key products, such as common alloy aluminum, surged. Prices of imported steels and aluminum products exerted significant downward pressure on domestic prices for carbon steel, stainless steel, and aluminum products which served to dampen gross margins relative to 2016 and 2018.

Ryerson combatted the margin pressure experienced in 2017 by maintaining good expense discipline and asset efficiency. We did more work "under the hood" of our company in continuing to build tools and enablers such as our "virtual warehouse" that maps inside-of-Ryerson and outside-of-Ryerson supply chains across the industrial metals landscape for rapid quoting and faster customer solution generation. By improving speed to market through our omni-channel "go to market" strategy, we provided our customers greater access to our products, services and value-added capabilities in areas such as high-quality stainless steel polishing and value-added fabrication. We continued planting seeds throughout the year with a high degree of confidence that such planting would make for a better harvest.

In 2018, we put it all together and then some. We had our best year in more than a decade and put a marker down on how Ryerson's potential should be viewed as we move into the future. In short, we grew the business profitably both organically and inorganically. We expanded gross margins, excluding LIFO. We generated expense leverage. We managed assets efficiently, and the quality of our assets improved. We moved solidly into positive net book value territory for the first time in nine years, and we improved our capital structure and lowered our cash interest burden while further derisking our legacy liabilities. But here is the best part: we're still in the early innings of the opportunities we see before us as we build a better and stronger Ryerson. While 2018 was marked by a shift in global trade policies and movement of materials, the underlying and sustaining thesis for value-added processing and distribution of industrial metals remains intact. Even when the global economy delivers periodic upsets, the prevailing needs of society still apply, and that is a world that needs investment in long-life assets and infrastructure that drives the real engine of economic growth that is greater productivity. The industrial metals that Ryerson processes and distributes are at the epicenter of that investment and productivity. The opportunities within our industry are abundant despite intervals of economic volatility. It is important to keep this in mind as the need eventually comes due and cannot be further displaced.

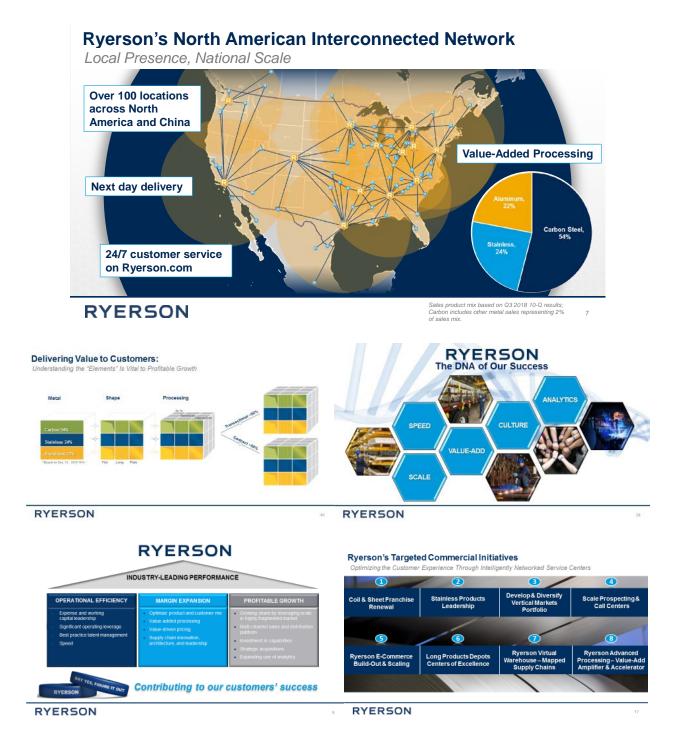
What we are building at Ryerson, piece by piece, effort by effort, and result by result isn't without a slip on the proverbial "banana peel" now and again. But taken in its entirety since 2007, ask yourself a question based upon the chart included below: which company do you like better, Ryerson circa 2007 or Ryerson circa 2018? Ask yourself another question: which way was the energy and momentum going in 2007 versus 2018? History and results will tell the tale, but I'll give you my take. Our organizational energy is vibrant and purposeful. Our momentum is decidedly positive, and our business model is right for the times in which we compete. In 2018, we made notable acquisitions of Fanello Industries and Central Steel & Wire Company. These acquisitions were strategic bullseyes in value-added processing and synergistic product mix additions. We also made investments in digitalization, omni-channel sales, automation, and differentiated equipment for enhanced metals fabrication.

	2007	2018	Change
Gross Margin, excl. LIFO & purchase accounting	14.6%	19.4%	1 4.8%
Adj. EBITDA, excl. LIFO Margin	3.6%	7.0%	1 3.4%
Cash Conversion Cycle	106 days	75 days	↓ 31 days
	2007	2018	Change
U.S. Industry Shipments	61M	42M	4 31%
Bloomberg Commodity Index	182	77	♦ 58%

U.S. shipments source: The Metals Service Center Institute

Reconciliations of gross margin, excluding LIFO and purchase accounting adjustments to gross margin and of Adjusted EBITDA, excluding LIFO to net income attributable to Ryerson Holding Corporation are included within our Form 8-K filing filed on March 5, 2019.

As we continue investing in our culture, our people, our tools, our enablers, and the customer experience, we think of Vince Lombardi's famous quote applied to a team, "Perfection is not attainable, but if we chase perfection, we can catch excellence." As an organization Ryerson can "chase perfection and catch excellence" as a collective group made up of shared talent, mission, and purpose. We can create great customer experiences profitably time-after-time with ever improving consistency. We can build our vision of mapping the industrial metals genome and bring our customers the solutions they want and need at speed, scale, completeness, and cost competitiveness. 2018 is now in the books and we have much more to do as we move into 2019. But we cannot let 2018 go without thanking our customers for the opportunity to be part of their success. I thank my Ryerson colleagues for embracing the challenges and opportunities inherent in building exceptional companies and making an important delivery on that promise in 2018. And I thank our shareholders for their continued support of Ryerson's progress towards significant shareholder value accretion.



As we move into 2019, our mission is to unite the themes expressed at the beginning of this letter with the themes expressed at the end of last year's letter. In November 2017, we rang the bell on the NYSE in celebration of Ryerson's 175th year in business. That bell ringing symbolized the promise of our future while honoring all the years of our past. It sounded the call to be better in ways that endure and sustain. It also gave us a measure of place and time, a measure of the season and realization of what actions to take and in what sequence. And so, to every season we take a turn, and that turn in 2019 is to reduce leverage and strengthen our balance sheet. In 2017 and 2018 we

planted seeds and cultivated growth. And though we will not turn our backs to good growth prospects, we will take a turn in 2019 to focus on debt reduction, increased free cash flow, and lowering Ryerson's weighted average cost of debt capital. It is important to understand the place and time we are in and the sequence of actions that will advance our cause in the most desirable way. That sequence of actions is to execute our business plan exceedingly well in 2019 and follow up an excellent year with another excellent year. With the milestones achieved in 2018, we have an opportunity in 2019 to rebalance how Ryerson has been valued by paying down debt and seeing that debt reduction morph to the equity side of the equation.

We hear the bell tones, we understand our place and time, and we know the actions to take and the season in which to take them. With our culture, our collective abilities, the right business model and execution of that model - the market, the money, and the math will prove out and we should see Ryerson's value continue to grow. I already look forward to next year's shareholder letter with great anticipation in sharing with you a letter founded, most importantly, upon another excellent year.

With Great Optimism,

dolie

Edward J. Lehner

President and Chief Executive Officer

March 13, 2019



Section 1: 10-K (10-K)

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One) ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2018

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from _

Commission File No. 001-34735

RYERSON HOLDING CORPORATION

(Exact name of registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of incorporation or organization)

26-1251524 (I.R.S. Employer Identification No.)

227 W. Monroe St., 27th Floor Chicago, Illinois 60606 (Address of principal executive offices)

(312) 292-5000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class Common Stock - \$0.01 par value Name of exchange on which registered **New York Stock Exchange**

Emerging growth company

 \times

П

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes \square No \square
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12
months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90
days. Yes ⊠ No □

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes 🗵 No 🗆

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K(§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or 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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting 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 13(a) of the Exchange Act. Yes □ No □

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes 🗆 No 🗵

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes D No 🗵

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, based on the closing price of a share of the registrant's common stock on June 30, 2018 as reported by the New York Stock Exchange on such date was approximately \$175,719,730. Shares of the registrant's common stock held by each executive officer, director and holder of 5% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This calculation does not reflect a determination that certain persons are affiliates of the registrant for any other purpose.

As of February 28, 2019 there were 37,453,080 shares of our Common Stock, par value \$0.01 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The information required to be furnished pursuant to Part III of this Form 10-K will be set forth in, and incorporated by reference from, the registrant's definitive proxy statement for the annual meeting of stockholders (the "2018 Proxy Statement"), which will be filed with the Securities and Exchange Commission not later than 120 days after the end of the fiscal year ended December 31, 2018.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains "forward-looking statements." Such statements can be identified by the use of forward-looking terminology such as "objectives," "goals," "preliminary," "range," "believes," "expects," "may," "estimates," "will," "should," "plans" or "anticipates" or the negative thereof or other variations thereon or comparable terminology, or by discussions of strategy. Readers are cautioned that any such forward-looking statements are not guarantees of future performance and may involve significant risks and uncertainties, and that actual results may vary materially from those anticipated or implied in the forward-looking statements as a result of various factors. Among the factors that significantly impact the metals distribution industry and our business are:

- highly cyclical fluctuations resulting from, among others, seasonality, market uncertainty, and costs of goods sold;
- remaining competitive and maintaining market share in the highly competitive and fragmented metals distribution industry;
- managing the costs of purchased metals relative to the price at which we sell our products during periods of rapid price escalation;
- our substantial indebtedness and the covenants in instruments governing such indebtedness;
- the impairment of goodwill that could result from, among other things, volatility in the markets in which we operate;
- the failure to effectively integrate newly acquired operations;
- the regulatory and other operational risks associated with our operations located outside of the United States (or "U.S.");
- the management of inventory and other costs and expenses;
- the adequacy of our efforts to mitigate cyber security risks and threats;
- reduced production schedules, layoffs or work stoppages by our own, our suppliers', or customers' personnel;
- · certain employee retirement benefit plans are underfunded and the actual costs could exceed current estimates;
- future funding for postretirement employee benefits may require substantial payments from current cash flow;
- prolonged disruption of our processing centers;
- the ability to retain and attract management and key personnel;
- the ability of management to focus on North American and foreign operations;
- the ability to comply with the terms of our asset-based credit facility and our indenture;
- the incurrence of substantial costs or liabilities to comply with, or as a result of violations of, environmental laws;
- the impact of new or pending litigation against us;
- the risk of product liability claims;
- our risk management strategies may result in losses;
- currency fluctuations in the U.S. dollar versus the Canadian dollar and the Chinese renminbi;
- customer, supplier, and competitor consolidation, bankruptcy or insolvency;
- the ownership of a majority of our equity securities by a single investor group.

These risks and uncertainties could cause actual results to differ materially from those suggested by the forward-looking statements. Forward-looking statements should, therefore, be considered in light of various factors, including those set forth in this Annual Report under "Risk Factors" and the caption "Industry and Operating Trends" included in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this Annual Report. Moreover, we caution you not to place undue reliance on these forward-looking statements, which speak only as of the date they were made. We do not undertake any obligation to revise or publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this Annual Report or to reflect the occurrence of unanticipated events.

PART I

ITEM 1. BUSINESS.

Ryerson Holding Corporation ("Ryerson Holding"), a Delaware corporation, is the parent company of Joseph T. Ryerson & Son, Inc. ("JT Ryerson"), a Delaware corporation. Affiliates of Platinum Equity, LLC ("Platinum") own approximately 21,037,500 shares of our common stock, which is approximately 56% of our issued and outstanding common stock.

We are a leading metals service center, a value-added processor and distributor of industrial metals with operations in the United States through JT Ryerson, in Canada through our indirect wholly-owned subsidiary Ryerson Canada, Inc., a Canadian corporation ("Ryerson Canada"), and in Mexico through our indirect wholly-owned subsidiary Ryerson Metals de Mexico, S. de R.L. de C.V., a Mexican corporation ("Ryerson Mexico"). In addition to our North American operations, we conduct materials processing and distribution operations in China through an indirect wholly-owned subsidiary, Ryerson China Limited ("Ryerson China"). Unless the context indicates otherwise, Ryerson Holding, JT Ryerson, Ryerson Canada, Ryerson China, and Ryerson Mexico together with their subsidiaries, are collectively referred to herein as "Ryerson," "we," "us," "our," or the "Company."

Our Company

We believe we are one of the largest value-add processors and distributors of industrial metals in North America measured in terms of sales. Our industry is highly fragmented with the largest companies accounting for only a small percentage of total market share. Our customer base ranges from local, independently owned fabricators and machine shops to large, international original equipment manufacturers. We carry a full line of over 75,000 products in stainless steel, aluminum, carbon steel, and alloy steels and a limited line of nickel and red metals in various shapes and forms. More than 75% of the products we sell are processed to meet customer requirements. Specifically, we provide a wide range of flat and long metals products, we offer numerous value-added processing and fabrication services such as bending, beveling, blanking, blasting, burning, cutting-to-length, drilling, embossing, flattening, forming, grinding, laser cutting, machining, notching, painting, perforating, polishing, punching, rolling, sawing, scribing, shearing, slitting, stamping, tapping, threading, welding, or other techniques to process materials to a specified thickness, length, width, shape, and surface quality pursuant to specific customer orders. Our value proposition also includes providing a superior level of customer service and responsiveness, technical services, and inventory management solutions. Our range of products together with our breadth of services allows us to create long-term partnerships with our customers and enhances our profitability. We continue to focus on our systems and enhance our online services to provide increased functionality and flexibility to our customers.

We track the processing, if any, performed on sold material for over 95% of our total revenues. The activities we track broadly fall into four main processing categories: (1) sheet processing (excludes fabrication activities), (2) as-is long and plate, (3) cut long and plate, and (4) fabrication. A key metric that we track is the percentage mix of revenue that comes from our fabrication capabilities. In 2010, the mix of revenue from fabrication activities was 6.7% of our sales, while in 2018, our mix of revenue from fabrication activities was 10.2% of our sales largely due to the strategic investments we have made in value-added processing capital expenditures. On July 2, 2018, JT Ryerson acquired Central Steel and Wire Company ("CS&W") a leading metal service center with locations across the Central and Eastern United States offering a wide selection of products and capabilities, with a commercial portfolio centered on bar, tube, plate, and steel products.

We operate 97 facilities across North America and five facilities in China. Our service centers are strategically located near our customers, which allows us to quickly process and deliver our products and services, often within the next day of receiving an order. We own, lease, or contract a fleet of tractors and trailers, allowing us to efficiently meet our customers' delivery demands. In addition, our scale enables us to maintain low operating costs. Our operating expenses as a percentage of sales for the years ended December 31, 2018 and 2017 were 14.0% and 14.3%, respectively.

We serve approximately 45,000 customers across a wide range of manufacturing end markets. Our geographic network and broad range of products and services allow us to serve large, international manufacturing companies across multiple locations. We believe the diverse end markets we serve reduce the volatility of our business in the aggregate.

Industry Overview

Metals service centers serve as key intermediaries between metal producers and end users of metal products. Metal producers offer commodity products and typically sell metals in the form of standard-sized coils, sheets, plates, structurals, bars, and tubes. Producers, mostly steel and aluminum mills, prefer large order quantities, longer lead times, and limited inventory to maximize capacity utilization across their typically higher capital-intensive structure.

End users of metal products seek to purchase metals with customized specifications, including value-added processing. End-users in highly diverse industries such as machinery, construction, and transportation often look for "one-stop" suppliers that can offer processing services along with lower order volumes, shorter lead times, and more reliable delivery.

As an intermediary, metals service centers aggregate end-users' demand, purchase metal in bulk to take advantage of economies of scale, and then process and sell metal that meets specific customer requirements.

The metals service center industry is comprised of many companies, the majority of which have limited product lines and inventories, with customers located in a specific geographic area. In general, competition is based on quality, service, price, and geographic proximity.

The metals service center industry typically experiences cash flow trends that are counter-cyclical to the revenue and volume growth of the industry. During an industry downturn, companies generally reduce working capital assets and generate cash as inventory and accounts receivable balances decline. As a result, operating cash flow and liquidity tend to increase during a downturn, which typically facilitates industry participants' ability to cover fixed costs and repay outstanding debt.

We compete with many other metals service centers and to a lesser extent with primary metal producers. Primary metal producers typically sell to larger customers that require regular shipments of higher volumes of steel than the traditional service center customer.

Competitive Strengths

Leading Market Position in North America.

Based on sales, we believe we are one of the largest service center companies for carbon, stainless steel, and aluminum in the North American market where we have a broad geographic presence with 97 facilities.

Our service centers are located near our customer locations, enabling us to provide timely delivery to customers across numerous geographic markets. Additionally, our widespread network of locations in the United States, Canada, and Mexico helps us to utilize our expertise to more efficiently serve customers with complex supply chain requirements across multiple manufacturing locations. We believe this is a key differentiator for customers who need a supplier that can reliably and consistently support them. Our ability to transfer inventory among our facilities better enables us to more timely and profitably source and process specialized items at regional locations throughout our network than if we were required to maintain inventory of all products and specialized equipment at each location.

Broad Geographic Reach Across Attractive End Markets.

Our operations serve a diverse range of industries including commercial ground transportation manufacturing, metal fabrication and machine shops, industrial machinery and equipment manufacturing, consumer durable equipment, HVAC manufacturing, construction equipment manufacturing, food processing and agricultural equipment manufacturing, and oil and gas. We believe this broad range of industries in which we sell our products and services reduces our risk related to a downturn in a specific industry. We believe that our ability to quickly adjust our offering based on regional and industry specific trends creates stability while also providing the opportunity to access specific growth markets.

Established Platform for Organic and Acquisition Growth.

Although there can be no guarantee of growth, we believe a number of our strategies, such as investing in value-added processing capabilities, analytically targeting attractive customers and end markets with our supply chain optimization service model, industry consolidation through targeted M&A, and providing customers faster and easier solutions to their metal needs will provide us with growth opportunities.

Given the highly fragmented nature of the metals service center industry, we believe there are numerous additional opportunities to acquire businesses and incorporate them into our existing infrastructure. Given our large scale and geographic reach, we believe we can add value to these businesses in a number of ways, including providing greater purchasing power, improving expense and working capital management, access to additional end markets, and broadening product mix.

Lean Operating Structure Providing Operating Leverage.

Ryerson has demonstrated the ability to effectively manage expenses through tactical productivity and spending improvements. In a stronger metals service center environment characterized by increases in demand and/or pricing, we believe that most additional expenses to service higher revenue and margins would come from variable expenses while further leveraging economies of scale on our existing fixed expenses. We effectively managed our costs in 2018 with increased volume and cost inflation, as expenses as a percentage of sales declined from 14.3% in 2017 to 14.0% in 2018.

We also continue to focus on inventory management. Average inventory days excluding LIFO increased from 71 days in 2017 to 73 days in 2018. This increase is due to the acquisition of CS&W in July 2018. On a same-store basis, days of supply remained at 71 days, within management's target range of 70 to 75 days. As a result of our initiatives, we maintain financial flexibility and believe we have a favorable cost structure compared to many of our peers.

Extensive Breadth of Products and Services for Diverse Customer Base.

We believe our broad product mix and marketing approach provides customers with a "one-stop shop" solution few other metals service center companies are able to offer. We provide a broad range of processing and fabrication services to meet the needs of our approximately 45,000 customers and typically fulfill more than 1,500,000 orders per year. We provide supply chain solutions, including just-in-time delivery and value-added processing to many original equipment manufacturing customers.

For the year ended December 31, 2018, no single customer, including their subcontractors, accounted for more than 6% of our sales, and our top 10 customers, including their subcontractors accounted for less than 15% of our sales.

Strong Relationships with Suppliers.

We are among the largest purchasers of metals in North America and have long-term relationships with many of our North American suppliers. We believe we are frequently one of the largest customers of our suppliers and that concentrating our orders among a core group of suppliers is effective for obtaining favorable pricing and service. We believe we have the opportunity to further leverage this strength through continued focus on price and volume using an analytics-driven approach to procurement. In addition, we view our strategic suppliers as supply chain partners. We focus on logistics, lead times, rolling schedules, and scrap return programs to drive value-based buying that is advantageous for us. Metals producers worldwide are consolidating, and large, geographically diversified customers, such as Ryerson, are desirable partners for these larger suppliers. Our relationships with suppliers often provide us with access to metals when supply is constrained. Through our knowledge of the global metals marketplace and capabilities of specific mills we believe we have developed an advantageous global purchasing strategy.

Experienced Management Team with Deep Industry Knowledge.

Our senior management team has extensive industry and operational experience and has been instrumental in optimizing and implementing our strategy over the last five years. Our senior management has an average of more than 20 years of experience in the metals or service center industries. Our CEO, Mr. Edward Lehner, who joined the Company in August 2012 as CFO and became CEO in June 2015, has nearly 30 years of experience, predominantly in the metals industry. Mr. Erich Schnaufer, who joined the Company in 2005 and became CFO in January 2016, has nearly 30 years of financial and accounting experience and over 10 years with Ryerson.

Industry Outlook

The United States economy has grown since the recession of 2008. According to the Institute for Supply Management, the Purchasing Managers' Index ("PMI") was above 50% for 33 of the last 36 months, indicating general expansion in the U.S. manufacturing economy for the last three years. The PMI measures the economic health of the manufacturing sector and is a composite index based on five indicators: new orders, inventory levels, production, supplier deliveries, and the employment environment. PMI readings can be a good indicator of industrial activity and general economic growth.

Additionally, the overall U.S. economy is projected to maintain growth as evidenced by the Federal Reserve's midrange forecasted real GDP growth rates of 2.5%, 2.0%, and 1.8% for 2019, 2020, and 2021, respectively.

Steel demand in North America is largely dependent on growth of the automotive, industrial equipment, consumer appliance, and construction end markets. One of our key end markets is the industrial equipment sector, and according to the latest Livingston Survey, published by the Federal Reserve Bank of Philadelphia, U.S. industrial production expanded by 3.8% in 2018 and is expected to grow by 2.9% in 2019, and 2.0% in 2020.

China continues to be a key driver in the growth of global metals demand. According to the International Monetary Fund, China's GDP maintained growth of 6.6% in 2018 and is projected to grow 6.2% in 2019, and 6.2% in 2020.

Products and Services

We carry a full line of carbon steel, stainless steel, alloy steels, and aluminum, and a limited line of nickel and red metals. These materials are stocked in a number of shapes, including coils, sheets, rounds, hexagons, square and flat bars, plates, structurals, and tubing.

The following table shows our percentage of sales by major product lines for 2018, 2017, and 2016:

Product Line	2018	2017	2016
Carbon Steel Flat	27%	28%	28%
Carbon Steel Plate	11	10	9
Carbon Steel Long	14	12	13
Stainless Steel Flat	16	18	17
Stainless Steel Plate	4	4	4
Stainless Steel Long	4	4	3
Aluminum Flat	15	15	16
Aluminum Plate	3	3	3
Aluminum Long	4	4	5
Other		2	2
Total	100%	100%	100%

More than 75% of the materials sold by us are processed. We use processing and fabricating techniques such as bending, beveling, blanking, blasting, burning, cutting-to-length, drilling, embossing, flattening, forming, grinding, laser cutting, machining, notching, painting, perforating, polishing, punching, rolling, sawing, scribing, shearing, slitting, stamping, tapping, threading, welding, or other techniques to process materials to specified thickness, length, width, shape, and surface quality pursuant to specific customer orders. Among the most common processing techniques used by us are slitting, which involves cutting coiled metals to specified widths along the length of the coil, and leveling, which involves flattening coiled metals and cutting them to exact lengths. We also use third-party fabricators to outsource certain processes (such as pickling and other coating processes or heat treating).

The plate burning and fabrication processes are particularly important to us. These processes require sophisticated and expensive processing equipment. As a result, rather than making investments in such equipment, manufacturers have increasingly outsourced these processes to metals service centers.

As part of securing customer orders, we also provide services to our customers to assure cost effective material application while maintaining or improving the customers' product quality. Among our services are: just-in-time inventory programs, production of configured kits containing multiple custom products for ease of assembly by the customer, consignment arrangements, and the placement of our employees at a customer's site for inventory management and production and technical assistance. We also provide special stocking programs in which products that would not otherwise be stocked by us are held in inventory to meet certain customers' needs. These services are designed to reduce customers' costs by minimizing their investment in inventory and processing equipment and improving their production efficiency.

Customers

Our customer base is diverse, numbering approximately 45,000 and including most metal-consuming industries, most of which are cyclical. For the year ended December 31, 2018, no customer, including their subcontractors, accounted for more than 6 percent of our sales, and the top 10 customers, including their subcontractors, accounted for less than 15 percent of our sales. Substantially all of our sales are attributable to our U.S. operations and substantially all of our long-lived assets are located in the United States. The following table shows the Company's percentage of sales by metal consuming industry for 2018, 2017, and 2016:

	Per		
Metal Consuming Industry	2018	2017	2016
Metal fabrication and machine shops	22%	20%	18%
Industrial machinery and equipment	18	18	18
Commercial ground transportation	16	16	16
Consumer durable	11	11	11
Food processing and agricultural equipment	10	10	9
Construction equipment	8	9	9
HVAC	6	7	7
Oil & gas	5	5	5
Other	4	4	7
Total	100%	100%	100%

Some of our largest customers have procurement programs with us, typically ranging from three months to one year in duration. Pricing for these contracts is generally based on a pricing formula rather than a fixed price for the program duration. However, certain customer contracts are at fixed prices; to minimize our financial exposure, we generally match these fixed-price sales programs with fixed-price supply programs. In general, sales to customers are priced at the time of sale based on prevailing market prices.

Suppliers

For the year ended December 31, 2018, our top 25 suppliers, including their subcontractors, accounted for approximately 74% of our purchase dollars. We purchase the majority of our inventories at prevailing market prices from key suppliers with which we have established relationships to obtain improvements in price, quality, delivery, and service. We are generally able to meet our materials requirements because we use many suppliers, there is a substantial overlap of product offerings from these suppliers, and there are several other suppliers able to provide identical or similar products. Because of the competitive nature of the business, when metal prices increase due to product demand, mill surcharges, input costs, supplier consolidation, or other factors that in turn lead to supply constraints or longer mill lead times and higher procured material costs, we may not be able to fully pass increased material costs to customers. In recent decades, there have been significant consolidations among suppliers of carbon steel, stainless steel, and aluminum. We believe we will be able to meet our material requirements and believe we will continue to be among the largest customers of our suppliers.

Sales and Marketing

We maintain our own professional sales force. In addition to our office sales staff, we market and sell our products through the use of our field sales force that we believe has extensive product and customer knowledge and offers a comprehensive catalog of our products. Our office and field sales staffs, which together consist of approximately 790 employees, include technical personnel.

A portion of our customers experience seasonal slowdowns. Our sales, as measured in tonnage sold, in the months of July, November, and December traditionally have been lower than in other months because of a reduced number of shipping days and holiday or vacation closures for some customers. Consequently, our sales in the first two quarters of the year are usually higher than in the third and fourth quarters.

Capital Expenditures

We continue to make capital investments to maintain, improve, and expand processing capabilities. Investments by us in property, plant, and equipment, together with asset retirements for the five years ended December 31, 2018, excluding the initial purchase price of acquisitions are set forth below. The net capital change during such period aggregated to an increase of \$79.6 million.

	Add	litions	or S	ements Sales illions)	Net
2018	\$	38.4	\$	5.5	\$ 32.9
2017		25.1		24.9	0.2
2016		23.0		5.0	18.0
2015		22.3		9.1	13.2
2014		21.6		6.3	15.3

We currently anticipate capital expenditures, excluding acquisitions, of up to approximately \$35 million for 2019. We expect capital expenditures will be funded from cash generated by operations and available borrowings.

Employees

As of December 31, 2018, we employed approximately 4,300 persons in North America and 300 persons in China. Our North American workforce was comprised of approximately 1,800 office employees and approximately 2,500 plant employees. Sixteen percent of our plant employees were members of various unions, including the United Steel Workers and The International Brotherhood of Teamsters.

Renewals of six union contracts covering approximately 107 employees were successfully negotiated in 2018. Four contracts covering 89 employees are currently scheduled to expire in 2019.

Environmental, Health, and Safety Matters

Our facilities and operations are subject to many foreign, federal, state, and local laws and regulations relating to the protection of the environment and to health and safety. In particular, our operations are subject to extensive requirements relating to waste disposal, recycling, air and water emissions, the handling of regulated materials, remediation, underground storage tanks, asbestos-containing building materials, workplace exposure, and other matters. We believe that our operations are currently in substantial compliance with all such laws and do not presently anticipate substantial expenditures in the foreseeable future in order to meet environmental, workplace health or safety requirements, or to pay for any investigations, corrective action, or claims. Claims, enforcement actions, or investigations regarding personal injury, property damage, or violation of environmental laws could result in substantial costs to us, divert our management's attention, and result in significant liabilities, fines, or the suspension or interruption of our facilities.

We continue to analyze and implement safeguards to mitigate any environmental, health, and safety risks we may face. As a result, additional costs and liabilities may be incurred to comply with future requirements or to address newly discovered conditions, and these costs and liabilities could have a material adverse effect on the results of operations, financial condition, or cash flows. For example, there is increasing likelihood that additional regulation of greenhouse gas emissions will occur at the foreign, federal, state, and local level, which could affect us, our suppliers, and our customers. While the costs of compliance could be significant, given the uncertain outcome and timing of future action by the U.S. federal government and states on this issue, we cannot accurately predict the financial impact of future greenhouse gas regulations on our operations or our customers at this time. We do not currently anticipate any new programs disproportionately impacting us compared to our competitors.

Some of the properties currently or previously owned or leased by us are located in industrial areas or have a long history of heavy industrial use. We may incur environmental liabilities with respect to these properties in the future including costs of investigations, corrective action, claims for natural resource damages, claims by third parties relating to property damages, or claims relating to contamination at sites where we have sent waste for treatment or disposal. Based on currently available information we do not expect any investigation, remediation matters, or claims related to properties presently or formerly owned, operated, or to which we have sent waste for treatment or disposal would have a material adverse effect on our financial condition, results of operations, or cash flows.

In October 2011, the United States Environmental Protection Agency (the "EPA") named us as one of more than 100 businesses that may be a potentially responsible party for the Portland Harbor Superfund Site (the "PHS Site"). On January 6, 2017, the EPA issued an initial Record of Decision ("ROD") regarding the site. The ROD includes a combination of dredging, capping, and enhanced natural recovery that would take approximately thirteen years to construct plus additional time for monitored natural recovery, at an estimated present value cost of \$1.05 billion. At a meeting on December 4, 2018, the EPA announced that it expects parties to submit a plan to remediate the river and harbor per the original ROD within the next 2-3 years. It also expects allocation of amounts among the parties to be determined in the same time frame. It is willing to consider de minimus and de micromis settlements but is unlikely to approve any before completion of the remedial design process.

The EPA has not yet allocated responsibility for the contamination among the potentially responsible parties, including JT Ryerson. We do not currently have sufficient information available to us to determine whether the ROD will be executed as currently stated, whether and to what extent JT Ryerson may be held responsible for any of the identified contamination, and how much (if any) of the final plan's costs might ultimately be allocated to JT Ryerson. Therefore, management cannot predict the ultimate outcome of this matter or estimate a range of potential loss at this time.

Excluding any potential additional remediation costs resulting from any corrective action for the properties described above, we expect spending for pollution control projects to remain at historical levels below \$500,000 per year.

Our United States operations are also subject to the Department of Transportation Federal Motor Carrier Safety Regulations. We operate a private trucking motor fleet for making deliveries to some of our customers. Our drivers do not carry any material quantities of hazardous materials. Our foreign operations are subject to similar regulations. Future regulations could increase maintenance, replacement, and fuel costs for our fleet. These costs could have a material adverse effect on our results of operations, financial condition, or cash flows.

Intellectual Property

We own several U.S. and foreign trademarks, service marks, and copyrights. Certain of the trademarks are registered with the U.S. Patent and Trademark Office and, in certain circumstances, with the trademark offices of various foreign countries. We consider certain other information owned by us to be trade secrets. We protect our trade secrets by, among other things, entering into confidentiality agreements with our employees regarding such matters and implementing measures to restrict access to sensitive data and computer software source code on a need-to-know basis. We believe that these safeguards adequately protect our proprietary rights and we vigorously defend these rights. While we consider all our intellectual property rights as a whole to be important, we do not consider any single right to be essential to our operations as a whole.

Available Information

All periodic and current reports and other filings that we are required to file with the Securities and Exchange Commission ("SEC"), including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant Section 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge from the SEC's website (www.sec.gov) or through our Investor Relations website at www.ir.ryerson.com. Such documents are available as soon as reasonably practicable after electronic filing of the material with the SEC. Copies of these reports (excluding exhibits) may also be obtained free of charge, upon written request to: Investor Relations, Ryerson Holding Corporation, 227 W. Monroe St., 27th Floor, Chicago, Illinois 60606.

The Company also posts its Code of Ethics on its website. See "Directors, Executive Officers, and Corporate Governance—Code of Ethics" for more information regarding our Code of Ethics.

Our website address is included in this report for information purposes only. Our website and the information contained therein or connected thereto are not incorporated into this annual report on Form 10-K.

ITEM 1A. RISK FACTORS.

Our business faces many risks. You should carefully consider the risks and uncertainties described below, together with the other information in this report, including the consolidated financial statements and notes to consolidated financial statements. We cannot assure you that any of the events discussed in the risk factors below will not occur. These risks could have a material and adverse impact on our business, results of operations, financial condition, and cash flows.

Risks Related to Our Business and Industry

Weakness in the economy, market trends, and other conditions affecting the profitability and financial stability of our customers could negatively impact our sales growth and results of operations.

Economic and industry trends affect our business environments. We serve several industries in which the demand for our products and services is sensitive to the production activity, capital spending, and demand for products and services of our customers. Many of these customers operate in markets that are subject to highly cyclical fluctuations resulting from seasonality, market uncertainty, costs of goods sold, currency exchange rates, foreign competition, offshoring of production, oil and natural gas prices, geopolitical developments, and a variety of other factors beyond our control. Any of these factors could cause customers to idle or close facilities, delay purchases, reduce production levels, or experience reductions in the demand for their own products or services.

Any of these events could impair the ability of our customers to make full and timely payments or reduce the volume of products and services these customers purchase from us and could cause increased pressure on our selling prices and terms of sale.

We do not expect the cyclical nature of our industry to change and any downturn in our customers' industries could reduce our revenues and profitability or a significant or prolonged slowdown in activity in the United States (U.S.), Canada, or any other major world economy, or a segment of any such economy, could negatively impact our sales growth and results of operations.

The metals services business is very competitive and increased competition could reduce our revenues and gross margins.

The metals services industry is highly fragmented and competitive, consisting of a large number of small companies and a few relatively large companies. We face competition in all markets we serve. Competition is based principally on price, service, quality, production capabilities, inventory availability, and timely delivery. Competition in the various markets in which we participate comes from companies of various sizes, some of which have greater financial resources than we have and some of which have more established brand names in the local markets we serve. Increased competition could reduce our market share, force us to lower our prices, or to offer increased services at a higher cost, which could reduce our profitability.

Changing metals prices may have a significant impact on our liquidity, net sales, gross margins, operating income, and net income.

The metals services industry as a whole is cyclical and, at times, pricing and availability of metal can be volatile due to numerous factors beyond our control, including general domestic and international economic conditions, labor costs, sales levels, competition, levels of inventory held by other metals service centers, consolidation of metals producers, higher raw material costs for the producers of metals, import duties and tariffs, and currency exchange rates. This volatility can significantly affect the availability and cost of materials for us.

Our ability to pass on increases in costs in a timely manner depends on market conditions and may result in lower gross margins. We maintain substantial inventories of metal to accommodate the short lead times and just-in-time delivery requirements of our customers. Accordingly, we purchase metals in an effort to maintain our inventory at levels that we believe to be appropriate to satisfy the anticipated needs of our customers based upon historic buying practices, contracts with customers, and market conditions. When metals prices decline, customer demands for lower prices and our competitors' responses to those demands result in lower sale prices and, consequently, lower margins as we use existing metals inventory. Declines in prices or further reductions in sales volumes could adversely impact our ability to maintain our liquidity and to remain in compliance with certain financial covenants under our \$1 billion revolving credit facility (the "Ryerson Credit Facility"), as well as result in us incurring inventory or goodwill impairment charges. Changing metals prices therefore could significantly impact our liquidity, net sales, gross margins, operating income, and net income.

Changes in inflation may adversely affect gross margins.

Inflation impacts the costs at which we can procure product and the ability to increase prices to customers over time. Prolonged periods of deflation could adversely affect the degree to which we are able to increase sales through price increases.

Unexpected product shortages could negatively impact customer relationships, resulting in an adverse impact on results of operations.

Disruptions could occur due to factors beyond our control, including economic downturns, political unrest, port slowdowns, trade issues, including increased export or import duties or trade restrictions, and other factors, any of which could adversely affect a supplier's ability to manufacture or deliver products. For our sources of lower cost products from Asia and other areas of the world, the risk for disruptions has increased due to the additional lead time required and distances involved, and the current political climate seeking trade reform. If we were to experience difficulty in obtaining products, there could be a short-term adverse effect on results of operations and a longer-term adverse effect on customer relationships and our reputation. In addition, we have strategic relationships with a number of vendors. In the event we are unable to maintain those relations, there might be a loss of competitive pricing advantages which could, in turn, adversely affect results of operations.

Changes in customer or product mix could cause the gross margin percentage to decline.

From time to time, we experience changes in customer and product mix that affect gross margin. Changes in customer and product mix result primarily from business acquisitions, changes in customer demand, customer acquisitions, selling and marketing activities, and competition. If rapid growth with lower margin customers occurs, we will face pressure to maintain current gross margins, as these customers receive more discounted pricing due to their higher sales volume. There can be no assurance that we will be able to maintain historical gross margins in the future.

The volatility of the market could result in a material impairment of goodwill.

We evaluate goodwill annually on October 1 and whenever events or changes in circumstances indicate potential impairment. Events or changes in circumstances that could trigger an impairment review include significant underperformance relative to our historical or projected future operating results, significant changes in the manner or the use of our assets or the strategy for our overall business, and significant negative industry or economic trends. We test for impairment of goodwill by assessing various qualitative factors with respect to development in our business and the overall economy and calculating the fair value of a reporting unit using a combination of an income approach based on discounted future cash flows and a market approach at the date of valuation. Under the discounted cash flow method, the fair value of each reporting unit is estimated based on expected future economic benefits discounted to a present value at a rate of return commensurate with the risk associated with the investment. Projected cash flows are discounted to present value using an estimated weighted average cost of capital, which considers both returns to equity and debt investors. Please refer to the Section titled "Critical Accounting Estimates - Goodwill," of Item 7, "Management's Discussion and Analysis of Financial Conditions and Results of Operations," and Note 1 — "Summary of Accounting and Financial Policies" of Part II, Item 8 "Financial Statements and Supplementary Data" for further information.

We may not be able to successfully consummate and complete the integration of future acquisitions, and if we are unable to do so, it could disrupt operations and cause unanticipated increases in costs and/or decreases in revenues and results of operations.

We have grown through a combination of internal expansion, acquisitions, and joint ventures. We intend to continue to grow through selective acquisitions, but we may not be able to identify appropriate acquisition candidates, obtain financing on satisfactory terms, consummate acquisitions, or integrate acquired businesses effectively and profitably into our existing operations. Restrictions contained in the agreements governing our notes, the Ryerson Credit Facility, or our other existing or future debt may also inhibit our ability to make certain investments, including acquisitions, and participations in joint ventures.

Acquisitions, partnerships, joint ventures, and other business combination transactions, both foreign and domestic, involve various inherent risks, such as uncertainties in assessing value, strengths, weaknesses, liabilities, and potential profitability. There is also risk relating to our ability to achieve identified operating and financial synergies anticipated to result from the transactions. Additionally, problems could arise from the integration of acquired businesses, including unanticipated changes in the business or industry or general economic conditions that affect the assumptions underlying the acquisition. Our future success will depend on our ability to complete the integration of these future acquisitions successfully into our operations. Specifically, after any acquisition, customers may choose to diversify their supply chains to reduce reliance on a single supplier for a portion of their metals needs. We may not be able to retain all of our and an acquisition's customers, which may adversely affect our business and sales. Integrating acquisitions, particularly large acquisitions, requires us to enhance our operational and financial systems and employ additional qualified personnel, management, and financial resources, and may adversely affect our business by diverting management away from

day-to-day operations. Further, failure to successfully integrate acquisitions may adversely affect our profitability by creating significant operating inefficiencies that could increase our operating expenses as a percentage of sales and reduce our operating income. In addition, we may not realize expected cost savings from acquisitions. Any one or more of these factors could cause us to not realize the benefits anticipated or have a negative impact on the fair value of the reporting units. Accordingly, goodwill and intangible assets recorded as a result of acquisitions could become impaired.

We may not be able to retain or expand our customer base if the North American manufacturing industry continues to erode through moving offshore or through acquisition and merger or consolidation activity in our customers' industries.

Our customer base primarily includes manufacturing and industrial firms. Some of our customers operate in industries that are undergoing consolidation through acquisition and merger activity; some are considering or have considered relocating production operations overseas or outsourcing particular functions overseas; and some customers have closed as they were unable to compete successfully with overseas competitors. Our facilities are predominately located in the United States and Canada. To the extent that our customers cease U.S. operations, relocate or move operations overseas to regions in which we do not have a presence, we could lose their business. Acquirers of manufacturing and industrial firms may have suppliers of choice that do not include us, which could impact our customer base and market share.

Certain of our operations are located outside of the United States, which subjects us to risks associated with international activities.

Certain of our operations are located outside of the United States, primarily in Canada, China, and Mexico. We are subject to the Foreign Corrupt Practices Act ("FCPA"), which generally prohibits U.S. companies and their intermediaries from making corrupt payments or otherwise corruptly giving any thing of value to foreign officials for the purpose of obtaining or keeping business or otherwise obtaining favorable treatment, and requires companies to maintain adequate record-keeping and internal accounting practices. The FCPA applies to covered companies, individual directors, officers, employees, and agents. Under the FCPA, U.S. companies may be held liable for some actions taken by strategic or local partners or representatives. If we or our intermediaries fail to comply with the requirements of the FCPA, governmental authorities in the United States could seek to impose civil and/or criminal penalties.

We may be adversely affected by currency fluctuations in the U.S. dollar versus the Canadian dollar and the Chinese renminbi.

We have significant operations in Canada which incur the majority of their metal supply costs in U.S. dollars but earn the majority of their sales in Canadian dollars. Additionally, we have significant assets in China. We may from time to time experience losses when the value of the U.S. dollar strengthens against the Canadian dollar or the Chinese renminbi, which could have a material adverse effect on our results of operations. In addition, we are subject to translation risk when we consolidate our Canadian and Chinese subsidiaries' net assets into our balance sheet. Fluctuations in the value of the U.S. dollar versus the Canadian dollar or Chinese renminbi could reduce the value of these assets as reported in our financial statements, which could, as a result, reduce our stockholders' equity.

The Chinese government exerts substantial influence over the manner in which we must conduct our business activities, particularly with regards to the land our facilities are located on.

The Chinese government has exercised and continues to exercise substantial control over the Chinese economy through regulation and state ownership. Our ability to operate in China may be harmed by changes in its laws and regulations, including those relating to taxation, import and export tariffs, environmental regulations, land use rights, property, and other matters. We believe that our operations in China are in material compliance with all applicable legal and regulatory requirements. However, the central or local governments of the jurisdictions in which we operate may impose new, stricter regulations or interpretations of existing regulations that would require additional expenditures and efforts on our part to ensure our compliance with such regulations or interpretations. Moreover, the Chinese court system does not provide the same property and contract right guarantees as do courts in the United States and, accordingly, disputes may be protracted and resolution of claims may result in significant economic loss.

Additionally, there is no private ownership of land in China and all land ownership is held by the government of China, its agencies, and collectives, which issue land use rights that are generally renewable. We lease the land where our Chinese facilities are located from the Chinese government. If the Chinese government decided to terminate our land use rights agreements, our assets could become impaired and our ability to meet customer orders could be impacted.

Damage to our information technology infrastructure could harm our business.

The unavailability of any of our computer-based systems for any significant period of time could have a material adverse effect on our operations. In particular, our ability to manage inventory levels successfully largely depends on the efficient operation of our

computer hardware and software systems. We use management information systems to track inventory information at individual facilities, communicate customer information, and aggregate daily sales, margin, and promotional information. Difficulties associated with upgrades, installations of major software or hardware, and integration with new systems could have a material adverse effect on results of operations. We could be required to expend substantial resources to integrate our information systems with the systems of companies we have acquired. The integration of these systems may disrupt our business or lead to operating inefficiencies. In addition, these systems are vulnerable to, among other things, damage or interruption from fire, flood, tornado, and other natural disasters, power loss, computer system and network failures, operator negligence, physical and electronic loss of data, or security breaches and computer viruses.

We are subject to cybersecurity risks and may incur increasing costs in an effort to minimize those risks.

We depend on the proper functioning and availability of our information technology platform, including communications and data processing systems, in operating our business. These systems include software programs that are integral to the efficient operation of our business. We have established security measures, controls, and procedures, including established recovery procedures for critical systems and business functions, to safeguard our information technology systems and to prevent unauthorized access to such systems and any data processed or stored in such systems, and we periodically evaluate and test the adequacy of such systems, measures, controls, and procedures; however, there can be no guarantee that such systems, measures, controls, and procedures will be effective. Security breaches could expose us to a risk of loss or misuse of our information, litigation, and potential liability. In addition, cyber incidents that impact the availability, reliability, speed, accuracy, or other proper functioning of these systems could have a significant impact on our operations, and potentially on our results. We may not have the resources or technical sophistication to anticipate or prevent rapidly evolving types of cyberattacks. A significant cyber incident, including system failure, security breach, disruption by malware, or other damage could interrupt or delay our operations, result in a violation of applicable privacy and other laws, damage our reputation, cause a loss of customers, or give rise to monetary fines and other penalties, which could be significant.

Any significant work stoppages can harm our business.

As of December 31, 2018, we employed approximately 4,300 persons in North America and 300 persons in China. Our North American workforce was comprised of approximately 1,800 office employees and approximately 2,500 plant employees. Sixteen percent of our plant employees were members of various unions, including the United Steel Workers and The International Brotherhood of Teamsters.

Renewals of six union contracts covering approximately 107 employees were successfully negotiated in 2018. Four union contracts covering 89 employees are currently scheduled to expire in 2019.

Certain employee retirement benefit plans are underfunded and the actual cost of those benefits could exceed current estimates, which would require us to fund the shortfall.

As of December 31, 2018, our pension plan had an unfunded liability of \$181 million. Our actual costs for benefits required to be paid may exceed those projected and future actuarial assessments to the extent that those costs exceed the current assessment. Under those circumstances, the adjustments required to be made to our recorded liability for these benefits could have a material adverse effect on our results of operations and financial condition and cash payments to fund these plans could have a material adverse effect on our cash flows. We may be required to make substantial future contributions to improve the plan's funded status.

Future funding for postretirement employee benefits other than pensions also may require substantial payments from current cash flow.

We provide postretirement life insurance and medical benefits to certain eligible retired employees. Our unfunded postretirement benefit obligation as of December 31, 2018 was \$70 million. Our actual costs for benefits required to be paid may exceed those projected and future actuarial assessments to the extent that those costs exceed the current assessment. Under those circumstances, adjustments will be required to be made to our recorded liability for these benefits.

Any prolonged disruption of our processing centers could harm our business.

We have dedicated processing centers that permit us to produce standardized products in large volumes while maintaining low operating costs. We may suffer prolonged disruption in the operations of any of these facilities, whether due to labor or technical difficulties, destruction, or damage to any of the facilities or otherwise.

If we are unable to retain, attract, and motivate management and key personnel, it may adversely affect our business.

In order to compete and have continued growth, we must attract, retain, and motivate executives and other key employees, including those in managerial, technical, sales, marketing, and support positions. We believe that our success is due, in part, to our experienced management team. Losing the services of one or more members of our management team such as our CEO, Edward J. Lehner, and CFO, Erich S. Schnaufer, could adversely affect our business and possibly prevent us from improving our operational, financial, and information management systems and controls. We compete to hire employees and then must train them and develop their skills and competencies. In the future, we may need to retain and hire additional qualified sales, marketing, administrative, operating, and technical personnel, and to train and manage new personnel. Our ability to implement our business plan is dependent on our ability to retain, hire, and train a large number of qualified employees each year. Our results of operations could be adversely affected by increased costs due to increased competition for employees, higher employee turnover, or increased employee benefit costs.

Our international operations and potential joint ventures may cause us to incur costs and risks that may distract management from effectively operating our North American business, and such operations or joint ventures may not be profitable.

We maintain foreign operations in Canada, China, and Mexico. International operations are subject to certain risks inherent in conducting business in, and with, foreign countries, including price controls, exchange controls, export controls, economic sanctions, duties, tariffs, limitations on participation in local enterprises, nationalization, expropriation and other governmental action, and changes in currency exchange rates. While we believe that our current arrangements with local partners provide us with experienced business partners in foreign countries, events or issues, including disagreements with our partners, may occur that require attention of our senior executives and may result in expenses or losses that erode the profitability of our foreign operations or cause our capital investments abroad to be unprofitable.

Lead time and the cost of our products could increase if we were to lose one of our primary suppliers.

If, for any reason, our primary suppliers of aluminum, carbon steel, stainless steel, or other metals should curtail or discontinue their delivery of such metals in the quantities needed and at prices that are competitive, our business could suffer. The number of available suppliers could be reduced by factors such as industry consolidation and bankruptcies affecting steel and metal producers. For the year ended December 31, 2018, our top 25 suppliers represented approximately 74% of our purchases. We could be significantly and adversely affected if delivery were disrupted from a major supplier. If, in the future, we were unable to obtain sufficient amounts of the necessary metals at competitive prices and on a timely basis from our traditional suppliers, we may not be able to obtain such metals from alternative sources at competitive prices to meet our delivery schedules, which could have a material adverse effect on our sales and profitability.

Global metal overcapacity and imports of metal products into the United States have adversely affected, and may again adversely affect, United States metal prices, which could impact our sales and results of operations.

Global metal production capacity currently exceeds global consumption of metal products. Such excess capacity sometimes results in metal manufacturers in certain countries exporting steel at prices that are lower than prevailing domestic prices and sometimes at or below their cost of production. Excessive imports of metal into the United States, such as in recent years, have exerted and may continue to exert, downward pressure on United States steel prices which negatively affects our ability to increase our sales and results of operations.

The U.S. government has enacted several trade actions in 2018 including tariffs on imported steel and aluminum products under Section 232 of the Trade Expansion Act. It is expected that these trade actions, while in effect, will limit metal imports from non-exempt countries. These trade actions have favorably impacted Ryerson's average selling prices and gross margins in 2018. If these trade actions are relaxed, repealed, or if relatively higher U.S. metal prices make it attractive for foreign metal producers to export their products to the U.S., despite the presence of duties or tariffs, the resurgence of substantial imports of foreign steel could create downward pressure on U.S. metal prices which could have a material adverse effect on sales prices and future results of operations. Further, foreign administrations have responded to the trade actions imposed by the U.S. with trade actions in kind, adding further uncertainty to U.S. pricing and supply conditions. To the extent these tariffs and other trade actions result in a decrease in international demand for steel and aluminum, or products manufactured therefrom and, produced in the United States, or otherwise negatively impact demand for our products, our business may be adversely impacted.

We could incur substantial costs related to environmental, health, and safety laws.

Our operations are subject to increasingly stringent environmental, health, and safety laws. These include laws that impose limitations on the discharge of pollutants into the air and water and establish standards for the treatment, storage, and disposal of

regulated materials, and the investigation and remediation of contaminated soil, surface water, and groundwater. Failure to maintain or achieve compliance with these laws or with the permits required for our operations could result in substantial increases in operating costs and capital expenditures. In addition, we may be subject to fines and civil or criminal sanctions, third party claims for property damage or personal injury, worker's compensation or personal injury claims, cleanup costs, or temporary or permanent discontinuance of operations. Certain of our facilities are located in industrial areas, have a history of heavy industrial use and have been in operation for many years and, over time, we and other predecessor operators of these facilities have generated, used, handled, and disposed of hazardous and other regulated wastes. Environmental liabilities could exist, including cleanup obligations at these facilities or at off-site locations where materials from our operations were disposed of, which could result in future expenditures that cannot be currently quantified and which could have a material adverse effect on our financial position, results of operations, or cash flows. Such liabilities may be imposed without regard to fault or the legality of a party's conduct and may, in certain circumstances, be joint and several. Future changes to environmental, health, and safety laws, including those related to climate change, could result in material liabilities and costs, constrain operations or make such operations more costly for us, our suppliers, and our customers.

In October 2011, the United States Environmental Protection Agency ("EPA") named us as one of more than 100 businesses that may be a potentially responsible party for the Portland Harbor Superfund Site (the "PHS Site"). On January 6, 2017, the EPA issued an initial Record of Decision ("ROD") regarding the site. The ROD includes a combination of dredging, capping, and enhanced natural recovery that would take approximately thirteen years to construct plus additional time for monitored natural recovery, at an estimated present value cost of \$1.05 billion. At a meeting on December 4, 2018, the EPA announced that it expects parties to submit a plan to remediate the river and harbor per the original ROD within the next 2-3 years. It also expects allocation of amounts among the parties to be determined in the same time frame. It is willing to consider de minimus and de micromis settlements but is unlikely to approve any before completion of the remedial design process.

The EPA has not yet allocated responsibility for the contamination among the potentially responsible parties, including JT Ryerson. We do not currently have sufficient information available to us to determine whether the ROD will be executed as currently stated, whether and to what extent JT Ryerson may be held responsible for any of the identified contamination, and how much (if any) of the final plan's costs might ultimately be allocated to JT Ryerson. Therefore, management cannot predict the ultimate outcome of this matter or estimate a range of potential loss at this time.

Regulations related to conflict-free minerals may force us to incur additional expenses and place us at a competitive disadvantage.

On August 22, 2012, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act"), the United States SEC adopted new requirements for reporting companies that use certain minerals and metals, known as "conflict minerals", in their products, whether or not these products are manufactured by third parties. These requirements require companies to diligence, disclose, and report whether or not such minerals originate from the Democratic Republic of Congo and adjoining countries. Since our supply chain is complex, we may not be able to conclusively verify the origins for all metals used in our products and we may face reputational challenges with our customers. Additionally, as there may be only a limited number of suppliers offering "conflict free" metals, we cannot be sure that we will be able to obtain necessary metals from such suppliers in sufficient quantities or at competitive prices. Accordingly, we could incur significant cost related to the compliance process, including potential difficulty or added costs in satisfying the disclosure requirements. Moreover, we may encounter challenges to satisfy those customers who require that all of the components of our products be certified as conflict free which could place us at a competitive disadvantage if we are unable to do so.

Tax changes could affect our effective tax rate, the value of our deferred tax assets, and future profitability.

Our future results could be adversely affected by changes in the effective tax rate or changes in the treatment of deferred tax assets as a result of changes in Ryerson's overall profitability, changes in the mix of earnings in countries with differing statutory tax rates, changes in tax legislation, the results of the examination of previously filed tax returns, and continuing assessment of the Company's tax exposures. In particular, although the passage of the Tax Cut and Jobs Act of 2017 reduced the U.S. tax rate to 21%, our future earnings could be negatively impacted by changes in tax legislation including changing tax rates and tax base such as limiting, phasing-out, or eliminating deductions or tax credits, changing rules for earnings repatriations and changing other tax laws in the U.S. or other countries. In addition, it is uncertain if, and to what extent, various states will conform to the new tax law and foreign countries will react by adopting tax legislation or taking other actions that could adversely affect our business.

We are subject to litigation that could strain our resources and distract management.

From time to time, we are involved in a variety of claims, lawsuits, and other disputes arising in the ordinary course of business. These suits concern issues including product liability, contract disputes, employee-related matters, and personal injury matters. It is not feasible to predict the outcome of all pending suits and claims, and the ultimate resolution of these matters as well as future lawsuits that could have a material adverse effect on our business, financial condition, results of operations, cash flows, or reputation.

We may face product liability claims that are costly and create adverse publicity.

If any of the products that we sell cause harm to any of our customers, we could be exposed to product liability lawsuits. If we were found liable under product liability claims, we could be required to pay substantial monetary damages. Further, even if we successfully defended ourselves against this type of claim, we could be forced to spend a substantial amount of money in litigation expenses, our management could be required to spend valuable time in the defense against these claims, and our reputation could suffer.

Our risk management strategies may result in losses.

From time to time, we may use fixed-price and/or fixed-volume supplier contracts to offset contracts with customers. Additionally, we may use foreign exchange contracts and interest rate swaps to hedge Canadian dollar, Euro, and floating rate debt exposures. These risk management strategies pose certain risks, including the risk that losses on a hedge position may exceed the amount invested in such instruments. Moreover, a party in a hedging transaction may be unavailable or unwilling to settle our obligations, which could cause us to suffer corresponding losses. A hedging instrument may not be effective in eliminating all of the risks inherent in any particular position. Our profitability may be adversely affected during any period as a result of use of such instruments.

Risks Related to Ownership of Our Common Stock

The market price for our common stock may be volatile.

Historically, there has been volatility in the market price for our common stock. Furthermore, the market price of our common stock could fluctuate substantially in the future in response to a number of factors, including, but not limited to, the risk factors described herein. Examples include:

- changes in commodity prices, especially metals;
- announcement of our quarterly operating results or the operating results of other metals service centers;
- changes in financial estimates or recommendations by stock market analysts regarding us or our competitors;
- the operating and stock performance of other companies that investors may deem comparable;
- press releases, earnings releases, or publicity relating to us or our competitors or relating to trends in the metals service center industry;
- inability to meet securities analysts' and investors' quarterly or annual estimates or targets of our performance;
- sales of our common stock by large or controlling shareholders;
- the amount of shares acquired for short-term investments;
- general domestic or international economic, market, and political conditions; and
- announcements by us or our competitors of significant acquisitions, dispositions or joint ventures, or other material events impacting the domestic or global metals industry.

In the past, the stock market has experienced significant price and volume fluctuations. This volatility has had a significant effect on the market prices of securities issued by many companies for reasons unrelated to their specific operating performance. These factors may adversely affect the trading price of our common stock, regardless of actual operating performance.

In addition, stock markets from time to time experience extreme price and volume fluctuations that may be unrelated or disproportionate to the operating performance of companies. In the past, some shareholders have brought securities class action lawsuits against companies following periods of volatility in the market price of their securities. We may in the future be the target of similar litigation. Securities litigation, regardless of whether our defense is ultimately successful, could result in substantial costs and divert management's attention and resources.

We have a substantial amount of indebtedness, which could adversely affect our financial position and prevent us from fulfilling our financial obligations.

We currently have a substantial amount of indebtedness. As of December 31, 2018, our total indebtedness was approximately \$1,153.3 million and we had approximately \$392 million of unused capacity under the Ryerson Credit Facility. Our substantial indebtedness may:

- make it difficult for us to satisfy our financial obligations, including making scheduled principal and interest payments on our outstanding notes and our other indebtedness;
- limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions, or other general corporate purposes;
- limit our ability to use our cash flow for future working capital, capital expenditures, acquisitions, or other general corporate purposes;
- require us to use a substantial portion of our cash flow from operations to make debt service payments;
- limit our flexibility to plan for, or react to, changes in our business and industry;
- place us at a competitive disadvantage compared to our less leveraged competitors; and
- increase our vulnerability to the impact of adverse economic and industry conditions.

We may also incur additional indebtedness in the future. The terms of the Ryerson Credit Facility and the indenture governing our outstanding notes restrict but do not prohibit us from doing so, and the indebtedness incurred in compliance with these restrictions could be substantial. If new indebtedness is added to our current debt levels, the related risks that we now face could intensify.

The covenants in the Ryerson Credit Facility and the indenture governing our notes impose, and covenants contained in agreements governing indebtedness that we incur in the future may impose, restrictions that may limit our operating and financial flexibility.

The Ryerson Credit Facility and the indenture governing our outstanding notes contain a number of significant restrictions and covenants that limit our ability and the ability of our restricted subsidiaries, including JT Ryerson, to:

- incur additional debt;
- pay dividends on our capital stock or repurchase our capital stock;
- make certain investments or other restricted payments;
- create liens or use assets as security in other transactions;
- merge, consolidate, transfer, or dispose of substantially all of our assets; and
- engage in transactions with affiliates.

The terms of the Ryerson Credit Facility require that, in the event availability under the facility declines to a certain level, we maintain a minimum fixed charge coverage ratio at the end of each fiscal quarter. Total credit availability is limited by the amount of eligible accounts receivable, inventory, and qualified cash pledged as collateral under the agreement insofar as the Company is subject to a borrowing base comprised of the aggregate of these three amounts, less applicable reserves. As of December 31, 2018, total credit availability was \$392 million. See discussion regarding the Ryerson Credit Facility in the "Liquidity and Capital Resources" section of Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Additionally, subject to certain exceptions, the indenture governing the outstanding notes restricts JT Ryerson's ability to pay Ryerson Holding dividends. Our future indebtedness may contain covenants more restrictive in certain respects than the restrictions contained in the Ryerson Credit Facility and the indenture governing the notes. Operating results below current levels or other adverse factors, including a significant increase in interest rates, could result in our being unable to comply with financial covenants that are contained in the Ryerson Credit Facility or that may be contained in any future indebtedness. In addition, complying with these covenants may also cause us to take actions that are not favorable to holders of our notes and may make it more difficult for us to successfully execute our business strategy and compete against companies that are not subject to such restrictions.

We may not be able to generate sufficient cash to service all of our indebtedness.

We are highly leveraged. Our ability to make payments on our indebtedness depends on our ability to generate cash in the future. Our outstanding notes, the Ryerson Credit Facility, and our other outstanding indebtedness are expected to account for significant cash interest expenses. Accordingly, we will have to generate significant cash flows from operations to meet our debt service requirements. If we do not generate sufficient cash flow to meet our debt service and working capital requirements, we may be required to sell assets, seek additional capital, reduce capital expenditures, restructure or refinance all or a portion of our existing indebtedness, or seek additional financing. Moreover, insufficient cash flow may make it more difficult for us to obtain financing on terms that are acceptable to us, or at all.

The right to receive payment on the 2022 Notes and the guarantees will be subordinated to the liabilities of non-guarantor subsidiaries.

The notes and related guarantees are structurally subordinated to all indebtedness of our subsidiaries that are non-guarantors of the 2022 Senior Secured Notes (the "2022 Notes"). While the indenture governing the 2022 Notes limits the indebtedness and activities of these non-guarantor subsidiaries, holders of indebtedness of, and trade creditors of, non-guarantor subsidiaries, including lenders under bank financing agreements, are entitled to payments of their claims from the assets of such subsidiaries before those assets are made available for distribution to any guarantor, as direct or indirect shareholder. While the non-guarantor subsidiaries have agreed under the indenture not to pledge or encumber their assets (other than with respect to permitted liens) without equally and ratably securing the notes, they will not guarantee the 2022 Notes notwithstanding any such pledge or encumbrance in favor of the 2022 Notes.

The non-guarantor subsidiaries represented, respectively, 10.4% and 8.3% of our net sales and EBITDA for the fiscal year ended December 31, 2018. In addition, these non-guarantor subsidiaries represented respectively, 11.2% and 4.8% of our assets and liabilities, as of December 31, 2018.

Accordingly, in the event that any of the non-guarantor subsidiaries or joint venture entities become insolvent, liquidates, or otherwise reorganizes:

- the creditors of the guarantors (including the holders of the 2022 Notes) will have no right to proceed against such subsidiary's assets; and
- the creditors of such non-guarantor subsidiary, including trade creditors, will generally be entitled to payment in full from the sale or other disposal of assets of such subsidiary, as direct or indirect shareholder, and will be entitled to receive any distributions from such subsidiary.

Because a portion of our indebtedness bears interest at rates that fluctuate with changes in certain prevailing short-term interest rates, we are vulnerable to interest rate increases.

A portion of our indebtedness, including the Ryerson Credit Facility, bears interest at rates that fluctuate with changes in certain short-term prevailing interest rates. As of December 31, 2018, we had approximately \$535.9 million of outstanding borrowings under the Ryerson Credit Facility, with an additional \$392 million available for borrowing under such facility. Assuming a consistent level of debt through-out 2018, a 100 basis point change in the interest rate on our floating rate debt effective from the beginning of the year would increase or decrease our interest expense under the Ryerson Credit Facility by approximately \$4.0 million on an annual basis. If interest rates increase dramatically, we could be unable to service our debt, which could have a material adverse effect on our business, financial condition, results of operations, or cash flows.

Changes in our credit ratings and outlook may reduce access to capital and increase borrowing costs.

Our credit ratings are based on a number of factors, including our financial strength and factors outside of our control, such as conditions affecting our industry generally or the introduction of new rating practices and methodologies. We cannot provide assurances that our current credit ratings will remain in effect or that the ratings will not be lowered, suspended, or withdrawn entirely by the rating agencies. If rating agencies lower, suspend, or withdraw the ratings, the market price or marketability of our securities may be adversely affected. In addition, any negative change in ratings could make it more difficult for us to raise capital on acceptable terms, impact the ability to obtain adequate financing, and result in higher interest costs for our existing credit facilities, including the Ryerson Credit Facility, or on future financings.

Platinum owns a significant percentage of our stock and has the right to nominate a majority of the members of the Corporation's board and will be able to exert control over matters subject to stockholder approval.

Platinum owns approximately 21,037,500 shares of our common stock, which is approximately 56% of our issued and outstanding common stock. Therefore, Platinum may be able to determine all matters requiring stockholder approval. For example, Platinum may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that our stockholders may believe are in their best interest as stockholders.

The Company is party to an investor rights agreement (the "Investor Rights Agreement") with certain affiliates of Platinum which provides, among other things, that for so long as Platinum collectively beneficially owns (i) at least 30% of the voting power of the outstanding capital stock of the Company, Platinum will have the right to nominate for election to the board of directors of the Company no fewer than that number of directors that would constitute a majority of the number of directors if there were no vacancies on the board, (ii) at least 15% but less than 30% of the voting power of the outstanding capital stock of the Company, Platinum will have the right to nominate two directors and (iii) at least 5% but less than 15% of the voting power of the outstanding capital stock of the Company, Platinum will have the right to nominate one director. The agreement also provides that if the size of the board of directors is increased or decreased at any time, Platinum's nomination rights will be proportionately increased or decreased, respectively, rounded up to the nearest whole number. As a result of Platinum's ownership of a majority of the Company's outstanding capital stock as well its board nomination rights pursuant to the Investor Rights Agreement, Platinum may significantly influence or effectively control our policies and operations, including the appointment of management, future issuances of our common stock or other securities, and the payment of dividends. In addition, Platinum has significant control over our decisions to enter into any other corporate transaction.

The interests of Platinum may not in all cases be aligned with the interests of the other holders of our common stock. For example, a sale of a substantial number of shares of stock in the future by Platinum could cause our stock price to decline. Further, Platinum could cause us to make acquisitions that increase the amount of the indebtedness that is secured or senior to the Company's existing debt or sell revenue-generating assets, impairing our ability to make payments under such debt. Additionally, Platinum is in the business of making investments in companies and may from time to time acquire and hold interests in businesses that compete directly or indirectly with us. Accordingly, Platinum may also pursue acquisition opportunities that may be complementary to our business, and as a result, those acquisition opportunities may not be available to us. In addition, Platinum may have an interest in pursuing acquisitions, divestitures, and other transactions that, in their judgment, could enhance their equity investment, even though such transactions might involve risks to holders of our common stock.

We are exempt from certain corporate governance requirements because we are a "controlled company" within the meaning of the NYSE rules and, as a result, our stockholders do not have the protections afforded by these corporate governance requirements.

Because Platinum controls more than 50% of the voting power of our common stock, we are considered to be a "controlled company" for purposes of the New York Stock Exchange ("NYSE") listing requirements. Under the NYSE rules, a "controlled company" may elect not to comply with certain NYSE corporate governance requirements, including (1) the requirement that a majority of our Board of Directors consist of independent directors, (2) the requirement that the nominating and corporate governance committee of our Board of Directors be composed entirely of independent directors, (3) the requirement that the compensation committee of our Board of Directors be composed entirely of independent directors, and (4) the requirement for an annual performance evaluation of the nomination/corporate governance and compensation committees. Given that Platinum controls a majority of the voting power of our common stock, we are permitted, and have elected, to opt out of compliance with certain NYSE corporate governance requirements. Accordingly, holders of our common stock do not have the same protections afforded to stockholders of companies that are subject to all of the NYSE corporate governance requirements.

Our corporate documents and Delaware law contain provisions that could discourage, delay, or prevent a change in control of the Company.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may make the acquisition of our company more difficult without the approval of our Board of Directors. These provisions:

- establish a classified Board of Directors so that not all members of our Board of Directors are elected at one time;
- authorize the issuance of undesignated preferred stock, the terms of which may be established and the shares of which may be issued without stockholder approval, and which may include super voting, special approval, dividend, or other rights or preferences superior to the rights of the holders of common stock;
- provide that the Board of Directors is expressly authorized to make, alter, or repeal our amended and restated bylaws;
- prohibit stockholders from acting by written consent if less than a majority of the voting power of our outstanding stock is controlled by Platinum; and
- establish advance notice requirements for nominations for elections to our Board of Directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

These anti-takeover provisions and other provisions under Delaware law could discourage, delay, or prevent a transaction involving a change in control of our company, even if doing so would benefit our stockholders. These provisions could also discourage proxy contests and make it more difficult for our stockholders to elect directors of their choosing and to cause us to take other corporate actions they desire.

Any issuance of preferred stock could make it difficult for another company to acquire us or could otherwise adversely affect holders of our common stock, which could depress the price of our common stock.

Our Board of Directors will have the authority to issue preferred stock and to determine the preferences, limitations, and relative rights of shares of preferred stock and to fix the number of shares constituting any series and the designation of such series, without any further vote or action by our stockholders. Our preferred stock could be issued with voting, liquidation, dividend, and other rights superior to the rights of our common stock. The potential issuance of preferred stock may delay or prevent a change in control of us, discouraging bids for our common stock at a premium over the market price, and adversely affect the market price and the voting and other rights of the holders of our common stock.

We have not and do not intend to pay regular cash dividends on our stock.

We do not anticipate declaring or paying regular cash dividends on our common stock or any other equity security in the foreseeable future. The amounts that may be available to us to pay cash dividends are restricted under our debt agreements. Any payment of cash dividends on our common stock in the future will be at the discretion of our Board of Directors and will depend upon our results of operations, earnings, capital requirements, financial condition, future prospects, contractual restrictions, and other factors deemed relevant by our Board of Directors. Therefore, you should not rely on dividend income from shares of our common stock. For more information, see "Dividend Policy." Your only opportunity to achieve a return on your investment in us may be if the market price of our common stock appreciates and you sell your shares at a profit, but there is no guarantee that the market price for our common stock will ever exceed the price that you pay for our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

Not applicable.

ITEM 2. PROPERTIES.

As of December 31, 2018, the Company's facilities are set forth below:

Operations in the United States

JT Ryerson maintains 84 operational facilities, including 6 locations that are dedicated to administration services. All of our metals service center facilities are in good condition and are adequate for JT Ryerson's existing operations. Approximately 40% of these facilities are leased. The lease terms expire at various times through 2028. Owned properties noted as vacated below have been closed and are in the process of being sold. JT Ryerson's properties and facilities are adequate to serve its present and anticipated needs.

Location	Own/Lease
Birmingham, AL	Owned
Mobile, AL	Owned
Fort Smith, AR	Owned
Hickman, AR**	Leased
Little Rock, AR**	Owned
Phoenix, AZ	Owned
Dos Palos, CA	Leased
Fresno, CA	Leased
Livermore, CA	Leased
Vernon, CA	Owned
Commerce City, CO	Owned
South Windsor, CT	Leased/Vacated
Wilmington, DE	Owned
Jacksonville, FL	Owned
Tampa Bay, FL	Owned
Lavonia, GA	Owned
Norcross, GA	Leased
Norcross, GA**	Owned
Des Moines, IA	Owned
Eldridge, IA**	Leased
Marshalltown, IA	Owned
Chicago, IL (Headquarters)*	Leased
Chicago, IL	Owned
Chicago, IL	Leased
Chicago, IL	Leased/Vacated
Dekalb, IL	Leased
Elgin, IL	Leased
Lisle, IL*	Leased
Burns Harbor, IN	Owned
Indianapolis, IN	Owned
Portage, IN	Leased
Wichita, KS	Leased
Shelbyville, KY**	Owned
Shreveport, LA	Owned
St. Rose, LA	Owned
Devens, MA	Owned
Detroit, MI*	Leased
Grand Rapids, MI*	Leased
Lansing, MI	Leased
Minneapolis, MN	Owned
Plymouth, MN	Owned
Maryland Heights, MO	Leased
North Kansas City, MO	Owned
Jackson, MS	Owned

Charlotte, NC**	Owned
Charlotte, NC	Leased
Greensboro, NC (2)	Owned
Pikeville, NC	Leased
Youngsville, NC	Leased
Omaha, NE	Owned
Lancaster, NY	Owned
Cincinnati, OH	Owned
Columbus, OH	Leased
Hamilton, OH*	Leased
Hilliard, OH	Owned
Streetsboro, OH	Leased
Strongsville, OH	Owned
Warren, OH	Leased/Vacated
Oklahoma City, OK	Owned
Tulsa, OK	Owned
Tigard, OR	Leased
Ambridge, PA**	Owned
Fairless Hills, PA**	Leased
Pittsburgh, PA*	Leased/Vacated
Charleston, SC**	Owned
Greenville, SC	Owned
Wellford, SC	Owned
Chattanooga, TN	Owned
Chattanooga, TN	Leased
Gallatin, TN	Leased
Knoxville, TN*	Leased
Memphis, TN	Owned
Dallas, TX	Owned
El Paso, TX	Leased
Houston, TX	Owned
Houston, TX (2)	Leased
McAllen, TX	Leased
Odessa, TX	Leased/Vacated
Salt Lake City, UT	Leased
Pounding Mill, VA	Owned
Richmond, VA	Owned
Renton, WA	Owned
Spokane, WA	Owned
Green Bay, WI	Owned
Green Bay, WI	Leased
Hammond, WI	Leased
Milwaukee, WI	Owned
Milwaukee, WI	Owned/Vacated
IVIII WAUNCE, VV I	Owned/ vacated
* OCC 1	

^{*} Office space only

^{**} Processing centers

Operations in Canada

Ryerson Canada, a wholly-owned indirect Canadian subsidiary of Ryerson Holding, has nine operational facilities in Canada. All of the metals service center facilities are in good condition and are adequate for Ryerson Canada's existing and anticipated operations. Four facilities are leased. The lease terms expire at various times through 2025.

Location	Own/Lease
Calgary, AB	Owned
Edmonton, AB	Owned
Richmond, BC	Owned
Winnipeg, MB	Owned
Winnipeg, MB	Leased
Saint John, NB	Owned
Brampton, ON	Leased
Burlington, ON (includes Canadian Headquarters)	Leased
Laval, QC	Leased/Vacated
Vaudreuil, QC	Leased

Operations in China

Ryerson China, an indirect wholly owned subsidiary of Ryerson Holding, has five service and processing centers in China, at Guangzhou, Dongguan, Kunshan, and Tianjin, performing coil processing, sheet metal fabrication, and plate processing. Ryerson China's headquarters office building is located in Kunshan. We own four buildings in China and have purchased the related land use rights. The remaining facility is leased. All of the facilities are in good condition and are adequate for Ryerson China's existing and anticipated operations.

Operations in Mexico

Ryerson Mexico, an indirect wholly owned subsidiary of Ryerson Holding, has four facilities in Mexico. We have service centers in Monterrey, Tijuana, Hermosillo, and Queretaro, all of which are leased. The facilities are in good condition and are adequate for Ryerson Mexico's existing and anticipated operations.

ITEM 3. LEGAL PROCEEDINGS.

In October 2011, the United States Environmental Protection Agency (the "EPA") named us as one of more than 100 businesses that may be a potentially responsible party for the Portland Harbor Superfund Site ("Portland Harbor"). On January 6, 2017, the EPA issued an initial Record of Decision ("ROD") regarding the site. The ROD includes a combination of dredging, capping, and enhanced natural recovery that would take approximately thirteen years to construct plus additional time for monitored natural recovery, at an estimated present value cost of \$1.05 billion. At a meeting on December 4, 2018, the EPA announced that it expects parties to submit a plan to remediate the river and harbor per the original ROD within the next 2-3 years. It also expects allocation of amounts among the parties to be determined in the same time frame. It is willing to consider de minimus and de micromis settlements but is unlikely to approve any before completion of the remedial design process.

The EPA has not yet allocated responsibility for the contamination among the potentially responsible parties, including JT Ryerson. We do not currently have sufficient information available to us to determine whether the ROD will be executed as currently stated, whether and to what extent JT Ryerson may be held responsible for any of the identified contamination, and how much (if any) of the final plan's costs might ultimately be allocated to JT Ryerson. Therefore, management cannot predict the ultimate outcome of this matter or estimate a range of potential loss at this time.

There are various other claims and pending actions against the Company. The amount of liability, if any, for those claims and actions at December 31, 2018 is not determinable but, in the opinion of management, such liability, if any, will not have a material adverse effect on the Company's financial position, results of operations, or cash flows. We maintain liability insurance coverage to assist in protecting our assets from losses arising from or related to activities associated with business operations.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Information for Common Stock

Our common stock has been listed on the New York Stock Exchange under the symbol "RYI" and was first traded on August 13, 2014.

Holders

As of February 28, 2019, there were 2 stockholders of record of our common stock. Because many shares of our common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of beneficial stockholders represented by these record holders.

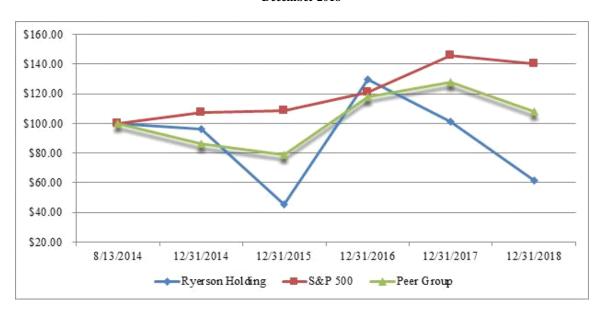
Dividend Policy

We have not declared any cash dividends for the past two years and we do not anticipate declaring or paying any regular cash dividends on our common stock in the foreseeable future. Any payment of cash dividends on our common stock in the future will be at the discretion of our Board of Directors and will depend upon our results of operations, earnings, capital requirements, financial condition, future prospects, contractual restrictions, including under the Ryerson Credit Facility and our outstanding notes, and other factors deemed relevant by our Board of Directors.

Performance Graph

The following graph and accompanying table show the cumulative total return to stockholders of Ryerson Holding's common stock relative to the cumulative total returns of the S&P 500 and a metals service center peer group (the "Peer Group"). The graph tracks the performance of a \$100 investment in each of the indices (with reinvestment of dividends) from August 13, 2014 to December 31, 2018. As of December 31, 2018 the Peer Group consisted of Reliance Steel & Aluminum Co. and Olympic Steel Inc., each of which has securities listed for trading on the NASDAQ; and Russel Metals Inc., which has securities listed for trading on the Toronto Stock Exchange. The returns of each member of the Peer Group are weighted according to that member's stock market capitalization. The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Comparison of 53 Month Cumulative Total Return Assumes Initial Investment of \$100 December 2018



This graph is not deemed to be "filed" with the U.S. Securities and Exchange Commission (SEC) or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934 (the Exchange Act), and should not be deemed to be incorporated by reference into any of our prior or subsequent filings under the Securities Act of 1933 or the Exchange Act.

	 8/13/14	12/31/14	12/31/15	12/31/16	12/31/17	12/31/18
Ryerson Holding	\$ 100.00	\$ 96.41	\$ 45.34	\$ 129.61	\$ 100.97	\$ 61.55
S&P 500	\$ 100.00	\$ 107.12	\$ 108.55	\$ 120.94	\$ 145.93	\$ 140.09
Peer Group	\$ 100.00	\$ 86.21	\$ 78.54	\$ 118.09	\$ 127.92	\$ 108.23

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Recent Sale of Unregistered Securities and Use of Proceeds

None.

ITEM 6. SELECTED FINANCIAL DATA.

The following table sets forth our selected historical consolidated financial information. Our selected historical Consolidated Statements of Operations data for the years ended December 31, 2016, 2017 and 2018 and the summary historical balance sheet data as of December 31, 2017 and 2018 have been derived from our audited consolidated financial statements included in Item 8. "Financial Statements and Supplementary Data." The selected historical Consolidated Statements of Operations data for the years

ended December 31, 2014 and 2015 and the summary historical balance sheet data as of December 31, 2014, 2015, and 2016 were derived from the audited financial statements and related notes thereto, which are not included in this Form 10-K.

The following consolidated financial information should be read together with Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the audited Consolidated Financial Statements of Ryerson Holding Corporation and the Notes thereto included in Item 8. "Financial Statements and Supplementary Data."

FIVE YEAR SUMMARY OF SELECTED FINANCIAL DATA AND OPERATING RESULTS (Dollars in millions, except per ton and per share data)

	Year Ended December 31,									
		2018	2017			2016		2015		2014
Statements of Operations Data:										
Net sales	\$	4,408.4	\$	3,364.7	\$	2,859.7	\$	3,167.2	\$	3,622.2
Cost of materials sold		3,650.3		2,782.2		2,289.1		2,599.5		3,028.4
Gross profit		758.1		582.5		570.6		567.7		593.8
Warehousing, delivery, selling, general, and administrative (1) (2)		614.7		481.4		447.5		451.9		512.2
Gain on sale of assets		_		_		_		(1.9)		(1.8)
Restructuring and other charges		4.2		_		1.0		2.5		_
Impairment charges on assets								7.7		
Operating profit		139.2		101.1		122.1		107.5		83.4
Other income and (expense), net (2) (3)		76.7		6.6		(6.1)		(9.3)		(2.9)
Interest and other expense on debt (4)		(99.2)		(91.0)		(89.9)		(96.3)		(107.4)
Income (loss) before income taxes		116.7		16.7		26.1		1.9		(26.9)
Provision (benefit) for income taxes		10.3		(1.3)		7.2		3.7		(0.7)
Net income (loss)		106.4		18.0		18.9		(1.8)		(26.2)
Less: Net income (loss) attributable to noncontrolling interest		0.4		0.9		0.2		(1.3)		(0.5)
Net income (loss) attributable to Ryerson Holding Corporation	\$	106.0	\$	17.1	\$	18.7	\$	(0.5)	\$	(25.7)
Earnings (loss) per share of common stock: (5)										
Basic earnings (loss) per share	\$	2.84	\$	0.46	\$	0.55	\$	(0.02)	\$	(1.01)
Diluted earnings (loss) per share	\$	2.81	\$	0.46	\$	0.54	\$	(0.02)	\$	(1.01)
Weighted average shares outstanding — Basic		37.3		37.2		34.3		32.1		25.4
Weighted average shares outstanding — Diluted		37.7		37.3		34.4		32.1		25.4
Balance Sheet Data (at period end):										
Cash and cash equivalents	\$	23.2	\$	77.4	\$	80.7	\$	63.2	\$	60.0
Restricted cash		1.1		1.1		1.0		1.2		2.0
Working capital		844.1		701.2		665.4		643.0		846.0
Property, plant, and equipment, net		489.0		422.9		388.2		400.3		428.2
Total assets		2,086.3		1,711.9		1,558.7		1,545.2		1,855.6
Long-term debt, including current maturities		1,153.3		1,045.7		963.5		1,023.5		1,242.1
Total equity (deficit)		75.9		(7.4)		(49.3)		(140.9)		(124.5)
Other Financial Data:										
Cash flows provided by (used in) operations	\$	57.4	\$	(2.5)	\$	24.8	\$	258.9	\$	(73.3)
Cash flows used in investing activities		(200.2)		(70.3)		(19.8)		(18.0)		(34.0)
Cash flows provided by (used in) financing activities		92.9		65.7		11.4		(232.0)		100.5
Capital expenditures		38.4		25.1		23.0		22.3		21.6
Depreciation and amortization		52.9		47.1		42.5		43.7		45.6
Volume and Per Ton Data:										
Tons shipped (000)		2,268		2,000		1,903		1,897		2,024
Average selling price per ton	\$	1,944	\$	1,682	\$	1,503	\$	1,670	\$	1,790
Gross profit per ton		334		291		300		299		293
Operating expenses per ton		273		241		236		243		252
Operating profit per ton		61		50		64		56		41

⁽¹⁾ The year ended December 31, 2014 includes \$32.7 million of one-time IPO-related expenses.

⁽²⁾ As a result of adopting Accounting Standards Update 2017-07, "Compensation - Retirement Benefits: Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post Retirement Benefit Cost," we have reclassified benefits of \$8.9 million, \$1.1 million, \$1.1 million, and \$3.0 million in the year ended December 31, 2017, 2016, 2015, and 2014, respectively, from Warehousing, delivery, selling, general, and administrative expense to Other income and (expense), net.

- The year ended December 31, 2018 includes a \$70.0 million gain on bargain purchase related to our Central Steel and Wire Company acquisition. The year ended December 31, 2017 includes an other-than-temporary impairment charge of \$0.2 million related to an equity investment. The year ended December 31, 2016 includes an other-than-temporary impairment charge of \$4.7 million related to an equity investment and a \$8.7 million loss on the retirement of debt related to the purchases and retirement of our 9.0% Senior Notes due 2017 (the "2017 Notes") and 11.25% Senior Notes due 2018 (the "2018 Notes"). The year ended December 31, 2015 includes an other-than-temporary impairment charge of \$12.3 million in the first quarter of 2015 related to an equity investment and a \$0.3 million gain on the retirement of debt related to the purchases of a portion of our 2017 Notes and 2018 Notes. The year ended December 31, 2014 includes \$11.2 million of expense related to the premium paid to redeem \$99.5 million of 2018 Notes. Remaining amounts in each year are related to foreign currency gains (losses).
- (4) The year ended December 31, 2018 included a \$0.5 million write off of debt issuance costs related to the repurchase of the 2022 Notes. The year ended December 31, 2015 includes a \$2.9 million write off of debt issuance costs associated with our prior credit facility upon entering into a new revolving credit facility on July 24, 2015.
- (5) On July 23, 2014, our Board of Directors approved a 4.25 for 1.00 stock split (the "Stock Split") of the Company's common stock effective August 5, 2014. The following amounts related to earnings per share and shares outstanding have been adjusted for the Stock Split for all periods reported.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis should be read in conjunction with Item 6. "Selected Financial Data" and the audited Consolidated Financial Statements of Ryerson Holding Corporation and Subsidiaries and the Notes thereto in Item 8. "Financial Statements and Supplementary Data." This discussion contains forward-looking statements that involve risks and uncertainties. See the section entitled "Special Note Regarding Forward-Looking Statements." Our actual results and the timing of selected events could differ materially from those discussed in these forward-looking statements as a result of certain factors, including those discussed in Item 1A. "Risk Factors" and elsewhere in this Form 10-K.

Overview

Business

Ryerson Holding Corporation ("Ryerson Holding"), a Delaware corporation, is the parent company of Joseph T. Ryerson & Son, Inc. ("JT Ryerson"), a Delaware corporation. Affiliates of Platinum Equity, LLC ("Platinum") own approximately 21,037,500 shares of our common stock, which is approximately 56% of our issued and outstanding common stock.

We are a leading metals service center, a value-added processor and distributor of industrial metals with operations in the United States through JT Ryerson, in Canada through our indirect wholly-owned subsidiary Ryerson Canada, Inc., a Canadian corporation ("Ryerson Canada"), and in Mexico through our indirect wholly-owned subsidiary Ryerson Metals de Mexico, S. de R.L. de C.V., a Mexican corporation ("Ryerson Mexico"). In addition to our North American operations, we conduct materials processing and distribution operations in China through an indirect wholly-owned subsidiary, Ryerson China Limited ("Ryerson China"). Unless the context indicates otherwise, Ryerson Holding, JT Ryerson, Ryerson Canada, Ryerson China, and Ryerson Mexico, together with their subsidiaries, are collectively referred to herein as "Ryerson," "we," "us," "our," or the "Company."

Industry and Operating Trends

We are a metals service center providing value-added processing and distribution of industrial metals with operations in the United States, Canada, Mexico, and China. We purchase large quantities of metal products from primary producers and sell these materials in smaller quantities to a wide variety of metals-consuming industries. More than 75% of the metals products sold are processed by us by bending, beveling, blanking, blanking, burning, cutting-to-length, drilling, embossing, flattening, forming, grinding, laser cutting, machining, notching, painting, perforating, polishing, punching, rolling, sawing, scribing, shearing, slitting, stamping, tapping, threading, welding, or other techniques to process materials to a specified thickness, length, width, shape, and surface quality pursuant to specific customer orders.

Similar to other metals service centers, we maintain substantial inventories of metals to accommodate the short lead times and just-in-time delivery requirements of our customers. Accordingly, we purchase metals to maintain our inventory at levels that we believe to be appropriate to satisfy the anticipated needs of our customers based upon customer forecasts, historic buying practices, supply agreements with customers, mill lead times, and market conditions. Our commitments to purchase metals are generally at prevailing market prices in effect at the time we place our orders. At the request of our customers, we have entered into swaps in order to mitigate our customers' risk of volatility in the price of metals and we have entered into metals hedges to mitigate our own risk of volatility in the price of metals. We have no long-term, fixed-price metals purchase contracts. When metals prices decline, customer demands for lower prices and our competitors' responses to those demands could result in lower sale prices and, consequently, lower gross profits and earnings as we sell existing metals inventory. When metals prices increase, competitive conditions will influence how much of the price increase we may pass on to our customers.

The metals service center industry is cyclical and volatile in both demand and pricing, and difficult to predict. In 2018, we saw improved demand when viewed against the year ago period. According to the Metal Service Center Institute, U.S. service center volumes have increased by four percent compared to the year-ago period. In 2018, we experienced year-over-year growth in shipment volumes to nearly all of our end markets, most notably in the ground transportation and metal fabrication and machine shop sectors. We saw year-over-year shipment declines only in the HVAC and construction equipment sectors.

Overall, commodity prices trended higher in 2018. CRU hot-rolled carbon steel prices rose 21%, Midwest aluminum prices rose 3%, and stainless 304 surcharge prices rose 2% during the year. Higher commodity prices translated into higher selling prices for Ryerson, with per ton pricing increases of 16% during the year. Stronger demand and pricing were offset by higher procured metal costs, which resulted in flat gross margins in 2018.

Recent Industry Developments

On March 1, 2018, the White House announced a 25% tariff on all imported steel products and 10% tariff on all imported aluminum products for an indefinite amount of time under Section 232 of the Trade Expansion Act. Subsequently, the White House announced steel quotas, in lieu of tariffs, with South Korea. On May 1, 2018, the White House further announced agreements-in-principle with Argentina, Australia, and Brazil for permanent exemptions from the tariffs in exchange for export quotas or voluntary export restraints, with the exception of Australia which has not agreed to quotas at the time of this release. In August 2018, steel tariffs were increased to 50% for Turkey to offset inflation in the Turkish Lira.

Further trade actions announced by the U.S. under Section 301 of the Trade Act of 1974 imposed a 25% additional duty on \$34 billion worth of Chinese imports effective July 6, 2018. In September 2018, the U.S. imposed a 10% tariff on \$200 billion in additional Chinese imported goods to increase to 25% by March 1, 2019. Ryerson expects upward price pressure on metal products in the U.S. to the extent the Section 232 tariffs or other trade actions remain enacted with U.S. trading partners.

Foreign administrations have responded to the trade actions imposed by the U.S. with trade actions in kind, adding further uncertainty to U.S. pricing and supply conditions.

Acquisitions

On April 2, 2018, we acquired Fanello Industries ("Fanello"), a privately-owned metal service company located in Lavonia, Georgia. Fanello is a processor and service provider that supplies blanking, stamping, laser cutting, bending, and machining metal solutions to a diverse group of industries in the Southeastern United States.

On July 2, 2018, JT Ryerson acquired Central Steel and Wire Company ("CS&W"). CS&W is a leading metal service center with locations across the Central and Eastern United States offering a wide selection of products and capabilities, with a commercial portfolio centered on bar, tube, plate, and steel products. CS&W expanded our long, tube, and plate portfolio. Our combined commercial, operational, and processing strengths will provide a broader and deeper array of products to our customers in the Midwest and Northeast United States. The fair value of the consideration totaled \$163.5 million. Included in the 2018 financial results is \$347.5 million of revenue and \$78.5 million, including a \$70.0 million bargain purchase gain, of net income from CS&W since the acquisition date. Please refer to Note 2 — "Acquisitions" of Part II, Item 8 "Financial Statements and Supplementary Data" for further information on our 2018 acquisition of CS&W.

Components of Results of Operations

We generate substantially all of our revenue from sales of our metals products. The majority of revenue is recognized upon delivery of product to customers. The timing of shipment is substantially the same as the timing of delivery to customers given the proximity of our distribution sites to our customers. Revenues associated with products which we believe have no alternative use, and where the Company has an enforceable right to payment, are recognized on an over-time basis. Over-time revenues are recorded in proportion with the progress made toward completing the performance obligation.

Sales, cost of materials sold, gross profit, and operating expense control are the principal factors that impact our profitability:

Net Sales. Our sales volume and pricing are driven by market demand, which is largely determined by overall industrial production and conditions in specific industries in which our customers operate. Sales prices are also primarily driven by market factors such as overall demand and availability of product. Our net sales include revenue from product sales, net of returns, allowances, customer discounts, and incentives.

Cost of materials sold. Cost of materials sold includes metal purchase and in-bound freight costs, third-party processing costs, and direct and indirect internal processing costs. The cost of materials sold fluctuates with our sales volume and our ability to purchase metals at competitive prices. Increases in sales volume generally enable us both to improve purchasing leverage with suppliers, as we buy larger quantities of metals inventories.

Gross profit. Gross profit is the difference between net sales and the cost of materials sold. Our sales prices to our customers are subject to market competition. Achieving acceptable levels of gross profit is dependent on our acquiring metals at competitive prices, our ability to manage the impact of changing prices, and efficiently managing our internal and external processing costs.

Operating expenses. Optimizing business processes and asset utilization to lower fixed expenses such as employee, facility, and truck fleet costs which cannot be rapidly reduced in times of declining volume, and maintaining low fixed cost structure in times of increasing sales volume, have a significant impact on our profitability. Operating expenses include costs related to warehousing and distributing our products as well as selling, general, and administrative expenses.

Results of Operations

The following table sets forth our condensed consolidated statements of income data:

	ear Ended cember 31, 2018	% of Net Sales	Year Ended December 31, 2017	% of Net Sales	Year Ended December 31, 2016	% of Net Sales
Net sales	\$ 4,408.4	100.0%	\$ 3,364.7	100.0%	\$ 2,859.7	100.0%
Cost of materials sold	3,650.3	82.8	2,782.2	82.7	2,289.1	80.0
Gross profit	758.1	17.2	582.5	17.3	570.6	20.0
Warehousing, delivery, selling, general, and administrative expenses	614.7	13.9	481.4	14.3	447.5	15.7
Restructuring and other charges	4.2	0.1			1.0	<u> </u>
Operating profit	139.2	3.2	101.1	3.0	122.1	4.3
Other expenses	 (22.5)	(0.6)	(84.4)	(2.5)	(96.0)	(3.4)
Income before income taxes	116.7	2.6	16.7	0.5	26.1	0.9
Provision (benefit) for income taxes	10.3	0.2	(1.3)		7.2	0.2
Net income	 106.4	2.4	18.0	0.5	18.9	0.7
Less: Net income attributable to noncontrolling interest	 0.4		0.9		0.2	
Net income attributable to Ryerson Holding						
Corporation	\$ 106.0	2.4%	\$ 17.1	0.5%	\$ 18.7	0.7%
Basic earnings per share	\$ 2.84		\$ 0.46		\$ 0.55	
Diluted earnings per share	\$ 2.81		\$ 0.46		\$ 0.54	

The following table shows the Company's percentage of sales by major product line:

	Yea	Year Ended December 31,				
	2018	2017	2016			
Product Line	(F	(Percentage of Sales)				
Carbon Steel Flat	27%	28%	28%			
Carbon Steel Plate	11	10	9			
Carbon Steel Long	14	12	13			
Stainless Steel Flat	16	18	17			
Stainless Steel Plate	4	4	4			
Stainless Steel Long	4	4	3			
Aluminum Flat	15	15	16			
Aluminum Plate	3	3	3			
Aluminum Long	4	4	5			
Other	2	2	2			
Total	100%	100%	100%			

Comparison of the year ended December 31, 2018 with the year ended December 31, 2017

Net Sales

	 i ear Ended	December	31,		Dollar	rercentage
	 2018		2017		hange	change
			(\$ in millions)			
Net sales	\$ 4,408.4	\$	3,364.7	\$	1,043.7	31.0%
Net sales, same-store	\$ 4,060.9	\$	3,364.7	\$	696.2	20.7%
	 Year Ended	31,		Tons	Percentage	
	 2018		2017	change		<u>change</u>
			(in thousands)			
Tons sold	2,268		2,000		268	13.4%

Veer Ended December 31

Dallan

81

2,000

Parcentage

4.1%

	 Year Ended	December 31,		P	rice	Percentage
	 2018	2017		<u>ch</u>	ange	change
Average selling price per ton sold	\$ 1,944	\$	1,682	\$	262	15.6%
Average selling price per top sold same-store	\$ 1 951	\$	1.682	\$	269	16.0%

2,081

Revenue for the year ended December 31, 2018 increased from the same period a year ago due to higher average selling prices and higher tons sold reflecting improved economic conditions in the metals market. Net sales and tons sold also increased in 2018 due to the acquisition of CS&W on July 2, 2018. Excluding CS&W (same-store results), average selling price per ton increased for all of our product lines in 2018 with the largest increases in our carbon plate, aluminum plate, and stainless plate products. Prices increased for our product lines in 2018 compared to 2017 as the impact of Section 232 tariffs favorably impacted metal prices along with improved demand. As more fully discussed in Item 1A "Risk Factors" of this Annual Report on Form 10-K, the tariffs imposed on certain metal products under Section 232 of the Trade Expansion Act of 1962 have led to significant increases in the prices of the products we sell and our profitability. A rapid decline in metal prices from current levels could result in a significant adverse effect on our revenues, gross profit, and net income. Excluding CS&W, tons sold also increased in 2018 for all of our product lines with the largest increases in shipments of our carbon plate, stainless plate, and aluminum flat product lines. Tons sold per ship day were 9,000 in 2018 as compared to 7,968 in 2017. Excluding CS&W, tons sold per ship day were 8,258 in 2018.

Cost of Materials Sold

Tons sold, same-store

		Year Ended De	ecem	ber 31,					
	 20182017			7					
	% of Net \$ Sales			\$	% of Net Sales	Dollar change		Percentage change	
	 			(\$ in mil	lions)				
Cost of materials sold	\$ 3,650.3	82.8%	\$	2,782.2	82.7%	\$	868.1	31.2%	

	_	Year Ended D		l December 31,		Dollar		Percentage	
		20	018		2017	Dollar change \$ 219	change		
of materials per ton sold	\$	3	1,610	\$	1,391	\$	219	15.7%	

The increase in cost of materials sold in 2018 compared to 2017 was primarily due to an increase in the average cost of materials sold per ton and the increase in tons sold. The average cost of materials sold increased for all of our product lines during 2018 with our carbon plate, stainless plate, and stainless long product lines increasing more than our other products lines.

During 2018, LIFO expense was \$90 million related to increases in pricing for all product lines. During 2017, LIFO expense was \$44 million related to increases in pricing for all product lines. LIFO expense in 2017 was offset by a \$24 million credit to reverse the lower of cost or market inventory reserve.

Gross Profit

		Year Ended D	ecem	ber 31,					
	 201	8		2017					
	\$	% of Net Sales		\$	% of Net Sales	Dollar change		Percentage change	
				(\$ in mill	ions)				
Gross profit	\$ 758.1	17.2%	\$	582.5	17.3%	\$	175.6	30.1%	

Gross profit dollars increased in 2018 compared to 2017 due to the increases in average selling price and tons sold as well as the acquisition of CS&W. During 2018, our revenue per ton increased at approximately the same pace as the increase in cost of materials sold per ton resulting in stable gross margins compared to the prior year.

Operating Expenses

			Year Ended D							
	2018				20	17				
		\$	% of Net Sales	<u>\$</u>		% of Net Sales	Dollar change		Percentage change	
					(\$ in n	nillions)				
Warehousing, delivery, selling, general, and administrative expenses	\$	614.7	13.9%	\$	481.4	14.3%	\$	133.3	27.7%	
Warehousing, delivery, selling, general, and administrative expenses,										
same-store	\$	548.4	13.5%	\$	481.4	14.3%	\$	67.0	13.9%	
Restructuring and other charges	\$	4.2	0.1%	\$	_	_	\$	4.2	_	

Total operating expenses in 2018 were \$137.5 million higher than in 2017 primarily due to the acquisition of CS&W on July 2, 2018, which increased operating expenses by \$66.3 million excluding restructuring charges. In addition, improved demand, higher employment levels, and general inflationary factors impacted expenses with increases in the following categories:

- Higher incentive compensation expense of \$29.5 million;
- higher salaries and wages of \$11.9 million;
- higher delivery expenses of \$9.4 million, primarily due to the increase in tons sold in 2018;
- higher facility expenses of \$6.2 million, primarily due to higher operating supply costs and higher depreciation expense;
- a restructuring charge of \$4.2 million in 2018 related primarily to severance costs for corporate staff reductions and two facility closures;
- higher sales expenses of \$2.8 million; and
- higher purchase consideration and other transaction costs of \$2.6 million.

On a per ton basis, operating expenses increased to \$273 per ton in 2018 from \$241 per ton in 2017.

Operating Profit

		Year Ended D	ecemb	er 31,				
	 201	2018 2017						
	\$	% of Net Sales		\$	% of Net Sales	Dollar change		Percentage change
	 			(\$ in mil	lions)			
Operating profit	\$ 139.2	3.2%	\$	101.1	3.0%	\$	38.1	37.7%

Our operating profit increased in 2018 compared to 2017 primarily due to the increase in average selling price and tons sold discussed above.

Other Expenses

			Year Ended D	ecember 31	,			
		201	8		2017			
	_	\$	% of Net Sales	\$	% of Net Sales (\$ in millions)		ollar nange	Percentage change
Interest and other expense on debt	\$	(99.2)	(2.3)%		(2.7)	% \$	(8.2)	9.0%
Other income and (expense), net		76.7	1.7	(6.6 0.2		70.1	1,062.1

Interest and other expense on debt increased in 2018 compared to 2017, primarily due to a higher level of credit facility borrowings outstanding resulting from the acquisition of CS&W on July 2, 2018, from increased working capital requirements, and higher interest rates on credit facility borrowings in 2018. The other income in 2018 includes a \$70.0 million gain on the bargain purchase of CS&W, a \$6.2 million credit from net periodic benefit cost other than service cost, and \$2.5 million of foreign currency gains, partially offset by a \$1.7 million loss on the redemption of debt. The other income in 2017 was primarily related to an \$8.9 million credit from net periodic benefit cost other than service cost, partially offset by foreign currency losses.

Provision for Income Taxes

The \$10.3 million income tax provision in 2018 primarily represents taxes at federal and local statutory rates where the Company operates, but generally excludes any tax benefit for losses in jurisdictions with historical losses. During 2018, the Company recorded benefits of \$1.3 million and \$3.6 million to reduce valuation allowances previously recorded against certain foreign deferred tax assets and state net operating losses, respectively. This benefit was offset by additional tax expense of \$1.5 million from the revaluation of deferred tax assets and liabilities at our new state tax rates resulting from our recent acquisition of CS&W. The effective tax rate for 2018 also reflects the reduced federal corporate income tax rate as a result of the enactment of the U.S. Tax Cuts and Jobs Act ("Tax Cuts and Jobs Act") in December 2017.

The Company's provision for income taxes in the fourth quarter of 2017 included \$7.2 million of estimated tax expense related to the one-time deemed repatriation transition tax ("Transition Tax"). An additional \$0.4 million of expense was recorded in 2018 as we refined our calculations. Of the \$7.6 million of estimated tax expense, \$0.9 million was reflected in our deferred tax balances and \$6.7 million was reflected in income taxes payable. Please refer to Note 17 — "Income Taxes" of Part II, Item 8 "Financial Statements and Supplementary Data" for further information on the impact of the Tax Cuts and Jobs Act.

Noncontrolling Interest

In both 2018 and 2017, Ryerson China's results of operations was income and the portion attributable to the noncontrolling interest was \$0.4 million and \$0.9 million, respectively.

Earnings Per Share

Basic earnings per share was \$2.84 in 2018 and \$0.46 in 2017. Diluted earnings per share was \$2.81 in 2018 and \$0.46 in 2017. The changes in earnings per share are due to the results of operations discussed above.

Comparison of the year ended December 31, 2017 with the year ended December 31, 2016

Net Sales

	2	017	-	2016	c	hange	change
				(\$ in millions)			
Net sales	\$	3,364.7	\$	2,859.7	\$	505.0	17.7%
	Year Ended December 31,					Tons	Percentage
	2	017		2016	c	hange	change
				(in thousands)			
Tons sold		2,000		1,903		97	5.1%
		Year Ended		D	Percentage		
			December 3.			Price	
	2	017		2016	c	hange	change

Year Ended December 31,

Dollar

179

1.503

Percentage

11.9%

Revenue for the year ended December 31, 2017 increased from the year ended December 31, 2016 due to higher average selling prices and higher tons sold. Average selling price increased in 2017 from the price levels in 2016 reflecting improved economic conditions in the metals market. Average selling price increased for all of our product lines in the year ended December 31, 2017 with the largest increases in our carbon flat, stainless flat, and stainless plate products. Tons sold increased in 2017 with the largest increases in shipments in our stainless long, aluminum flat, and carbon plate product lines. Tons sold per ship day were 7,968 in 2017 as compared to 7,552 in 2016.

1.682 \$

Cost of Materials Sold

Average selling price per ton sold

		Year Ended D	ecem	ber 31,			
	 2017			201	6		
	¢	% of Net % of Net		% of Net Sales	Dollar	Percentage change	
	 Φ	Sales		ு (\$ in mil		change	change
Cost of materials sold	\$ 2,782.2	82.7%	\$	2,289.1	80.0%	\$ 493	3.1 21.5%

	<u>Y</u> 0	ar Ended	Decem	ber 31,	(Cost	Percentage	
		2017		2016	ch	ange	change	
terials per ton sold	\$	1,391	\$	1,203	\$	188	15.6%	

The increase in cost of materials sold in 2017 compared to 2016 was primarily due to an increase in the average cost of materials sold per ton and the increase in tons sold. The average cost of materials sold for our carbon flat, carbon plate, and stainless flat product lines increased more than our other products during 2017, which was a faster increase than the increase in average selling price per ton for these products.

During 2017, LIFO expense was \$44 million related to increases in pricing for all product lines. During 2016, LIFO expense was \$7 million related to increases in pricing for carbon products. In 2017, we recorded income of \$24 million to adjust the lower of cost or market inventory reserve compared to income of \$14 million in 2016.

Gross Profit

		Year Ended D	ecem	ber 31,				
	 201	7		2016	<u>; </u>			
	\$	% of Net Sales		\$	% of Net Sales	Dollar cha	ange	Percentage change
	 			(\$ in mill	ions)			
Gross profit	\$ 582.5	17.3%	\$	570.6	20.0%	\$	11.9	2.1%

Gross profit dollars increased in 2017 compared to 2016, but gross profit as a percentage of sales decreased to 17.3% in 2017 compared to 20.0% in 2016 as a competitive pricing environment combined with increasing commodity prices compressed gross profit margin. While our revenue per ton increased in 2017 as compared to 2016, cost of materials sold per ton increased at a faster pace, resulting in lower gross margins.

Operating Expenses

			Year Ended D	ecei	mber 31,				
		20	17		20	16			
	_	\$	% of Net Sales		\$ (\$ in n	% of Net Sales nillions)	ollar nange_	Percentage change	
Warehousing, delivery, selling, general, and administrative expenses	\$	481.4	14.3%	\$	447.5	15.7%	\$ 33.9	7.6%	
Restructuring and other charges			_	\$	1.0		\$ (1.0)	(100.0)	

Operating expenses in 2017 were higher than in 2016 primarily due to the following reasons:

- Higher salaries and wages of \$10.3 million resulting mainly from an increase in headcount after the acquisitions of Laserflex and Guy Metals in 2017;
- higher facility expenses of \$8.0 million, primarily due to higher depreciation expense and higher operating supply costs;
- higher delivery expenses of \$7.8 million, primarily due to the increase in tons sold in 2017;
- higher employee benefit costs of \$5.7 million in 2017, primarily due to higher medical expenses; and
- higher sales expenses of \$2.4 million.

These changes were partially offset by:

• Lower incentive compensation expense of \$3.2 million.

On a per ton basis, operating expenses increased to \$241 per ton in 2017 from \$236 per ton in 2016

Operating Profit

	_		Year Ended D	ecen	nber 31,				
		201	17		2016	<u> </u>			
			% of Net			% of Net			Percentage
		\$	Sales		\$	Sales	Dol	lar change	change
					(\$ in mill	ions)			
Operating profit	\$	101.1	3.0%	\$	122.1	4.3%	\$	(21.0)	(17.2)%

Our operating profit decreased in 2017 compared to 2016 primarily due to the decrease in gross margin as a percent of sales discussed above.

Other Expenses

		Year Ended D	ecemb	er 31,			
	 201	7		201	6		
	\$	% of Net Sales		\$	% of Net Sales	Dollar change	Percentage change
Interest and other expense on debt	\$ (91.0)	(2.7)%	\$	(\$ 1n 1 (89.9)	millions) (3.1)%	\$ (1.1)	1.2%
Other income and (expense), net	6.6	0.2		(6.1)	(0.3)	12.7	(208.2)

Interest and other expense on debt increased in 2017 compared to 2016 as the interest rate on a portion of our outstanding Notes increased after we redeemed the \$569.9 million outstanding balance of our 9.00% Senior Notes due 2017 (the "2017 Notes"), repurchased \$121.9 million and thereafter redeemed the remaining outstanding \$48.5 million of our 11.25% Senior Notes due 2018 (the "2018 Notes"), and issued \$650.0 million of new 11.00% Senior Notes due 2022 (the "2022 Notes") in 2016, partially offset by a reduction in the amount of our outstanding Notes and lower amortization of debt issuance costs expense. The other income in 2017 was primarily related to an \$8.9 million credit from net periodic benefit cost other than service cost, partially offset by foreign currency losses. The other expense in 2016 was primarily related to a \$8.7 million net loss on debt redemptions, a \$4.7 million charge due to an other-than-temporary impairment recognized on an equity investment, and foreign currency losses of \$3.9 million, partially offset by a credit of \$11.1 million from net periodic benefit cost other than service cost.

Provision for Income Taxes

The \$1.3 million income tax benefit in 2017 includes tax expense on earnings in the U.S. and changes in our valuation allowances, adjusted for the impact of certain one-time items associated with the U.S. Tax Cuts and Jobs Act (the "Act") passed on

December 22, 2017. These one-time adjustments included a benefit for the revaluation of our deferred tax assets of \$10.6 million and the tax associated with the deemed repatriation of foreign earnings of \$7.2 million under the Act. The \$7.2 million income tax expense in 2016 results predominantly from tax expense on earnings in the U.S. and the inability to benefit losses in our foreign subsidiaries due to valuation allowances.

The Company's 2017 provision for income taxes included \$7.2 million of estimated tax expense related to the one-time deemed repatriation transition tax ("Transition Tax"). Of the \$7.2 million of estimated tax expense, \$0.5 million is reflected in our deferred tax balances and \$6.7 million is reflected in income taxes payable. We chose to include an estimate of the Transition Tax in 2017 due to the complex nature of the calculation and the short amount of time between passing of the legislation and the filing of our financial statements. Please refer to Note 17 — "Income Taxes" of Part II, Item 8 "Financial Statements and Supplementary Data" for further information on the impact of the Tax Cuts and Jobs Act.

Noncontrolling Interest

In 2017, Ryerson China's results of operations was income and the portion attributable to the noncontrolling interest was \$0.9 million. In 2016, Ryerson China's results of operations was income partially offset by a loss at our Brazil operations through Açofran Aços e Metais Ltda ("Açofran") in which we had a 50% direct ownership percentage, until we substantially liquidated our investment in Acofran during 2016. The portion of Ryerson China's and Acofran's results attributable to the noncontrolling interest in 2016 was income of \$0.2 million.

Earnings Per Share

Basic earnings per share was \$0.46 in 2017 and \$0.55 in 2016. Diluted earnings per share was \$0.46 in 2017 and \$0.54 in 2016. The changes in earnings per share are due to the results of operations discussed above as well as an increase in the weighted average shares outstanding after the issuance of 5 million shares of common stock in an underwritten public offering in July 2016.

Liquidity and Capital Resources

The Company's primary sources of liquidity are cash and cash equivalents, cash flows from operations, and borrowing availability under the \$1.0 billion revolving credit facility (the "Ryerson Credit Facility") that matures on November 16, 2021. Its principal source of operating cash is from the sale of metals and other materials. Its principal uses of cash are for payments associated with the procurement and processing of metals and other materials inventories, costs incurred for the warehousing and delivery of inventories and the selling and administrative costs of the business, capital expenditures, and for interest payments on debt.

The following table summarizes the Company's cash flows:

	 Y	ear End	led December 31	Ι,	
	 2018		2017		2016
		(Ir	millions)		
Net cash provided by (used in) operating activities	\$ 57.4	\$	(2.5)	\$	24.8
Net cash used in investing activities	(200.2)		(70.3)		(19.8)
Net cash provided by financing activities	92.9		65.7		11.4
Effect of exchange rates on cash	 (4.3)		3.9		0.9
Net increase (decrease) in cash and cash equivalents	\$ (54.2)	\$	(3.2)	\$	17.3

The Company had cash and cash equivalents at December 31, 2018 of \$23.2 million, compared to \$77.4 million at December 31, 2017, and \$80.7 million at December 31, 2016. The Company had \$1,153 million, \$1,046 million, and \$964 million of total debt outstanding, a debt-to-capitalization ratio of 94%, 101%, and 105%, and \$392 million, \$264 million, and \$225 million available under the Ryerson Credit Facility at December 31, 2018, 2017, and 2016, respectively. The Company had total liquidity (defined as cash and cash equivalents, marketable securities, and availability under the Ryerson Credit Facility and foreign debt facilities) of \$441 million, \$338 million, and \$301 million at December 31, 2018, 2017, and 2016, respectively. Total liquidity is not a U.S. generally accepted accounting principles ("GAAP") financial measure. We believe that total liquidity provides additional information for measuring our ability to fund our operations. Total liquidity does not represent, and should not be used as a substitute for, net income or cash flows from operations as determined in accordance with GAAP and total liquidity is not necessarily an indication of whether cash flow will be sufficient to fund our cash requirements.

Below is a reconciliation of cash and cash equivalents to total liquidity:

	Decemb	oer 31, 2018	Dec	ember 31, 2017	Dec	ember 31, 2016
			(In millions)		
Cash and cash equivalents	\$	23	\$	77	\$	81
Less: Qualified cash pledged as collateral		_		(28)		(31)
Availability under Ryerson Credit Facility and foreign debt facilities		418		289		251
Total liquidity	\$	441	\$	338	\$	301

Of the total cash and cash equivalents as of December 31, 2018, \$12 million was held in subsidiaries outside the United States which is deemed to be permanently reinvested. Ryerson does not currently foresee a need to repatriate funds from its non-U.S. subsidiaries. Although the Company has historically satisfied needs for more capital in the U.S. through debt or equity issuances, it could elect to repatriate funds held in foreign jurisdictions which could result in higher effective tax rates. The Company has not recorded a deferred tax liability for the effect of a possible repatriation of these assets as management intends to permanently reinvest these assets outside of the U.S. Specific plans for reinvestment include funding for future international acquisitions and funding of existing international operations.

Net cash provided by operating activities was \$57.4 million in 2018 compared to net cash used in operating activities of \$2.5 million in 2017 and net cash provided by operating activities of \$24.8 million in 2016. Net income was \$106.4 million, \$18.0 million, and \$18.9 million in 2018, 2017, and 2016 respectively. Cash provided by operating activities of \$57.4 million during the year ended December 31, 2018 was primarily due to the net income of \$106.4 million, an increase in accounts payable of \$58.4 million reflecting a higher cost of materials purchased at year-end 2018 compared to year-end 2017, and non-cash depreciation and amortization expense of \$52.9 million, partially offset by a non-cash gain on the bargain purchase of CS&W of \$70.0 million, an increase in accounts receivable of \$64.8 million resulting from higher sales levels at year-end 2018 compared to year-end 2017, and pension contributions of \$27.0 million. Cash used in operating activities of \$2.5 million during the year ended December 31, 2017 was primarily due to an increase in accounts receivable of \$44.0 million resulting from higher sales levels at year-end 2017 compared to year-end 2016, an increase in inventory of \$42.9 million reflecting higher material costs in 2017, pension contributions of \$21.7 million, an increase in deferred income taxes of \$9.2 million, and the payment of \$7.9 million of retiree medical costs, partially offset by an increase in accounts payable of \$58.1 million reflecting a higher cost of materials purchased at year-end 2017 compared to year-end 2016, non-cash depreciation and amortization expense of \$47.1 million, and net income of \$18.0 million. Cash provided by operating activities of \$24.8 million during the year ended December 31, 2016 was primarily due to non-cash depreciation and amortization expense of \$42.5 million, partially offset by an increase in accounts receivable of \$25.1 million, pension contributions of \$25.1 million, and premiums and fees related to debt modification of \$15.7 million.

Net cash used in investing activities was \$200.2 million, \$70.3 million, and \$19.8 million in 2018, 2017, and 2016, respectively. During 2018 we paid \$169.7 million, net of cash acquired, to purchase CS&W and Fanello Industries. During 2017 the Company paid \$49.2 million, net of cash acquired, to acquire all of the issued and outstanding capital stock of The Laserflex Corporation and Guy Metals, Inc. Capital expenditures for the years ended December 31, 2018, 2017, and 2016, were \$38.4 million, \$25.1 million, and \$23.0 million, respectively. The Company sold property, plant, and equipment and assets held for sale generating cash proceeds of \$5.9 million, \$3.8 million, and \$3.2 million during the years ended December 31, 2018, 2017, and 2016, respectively.

Net cash provided by financing activities was \$92.9 million for the year ended December 31, 2018. In 2018, net cash provided by financing activities was primarily due to an increase in credit facility borrowings of \$149.9 million, largely to finance the acquisitions of CS&W and Fanello Industries, an increase in book overdrafts of \$6.3 million, and proceeds of \$4.5 million from sale-leaseback transactions, partially offset by a \$52.2 million repurchase of the 2022 Notes, and \$13.7 million of principal payments under capital lease obligations. Net cash provided by financing activities was \$65.7 million for the year ended December 31, 2017. In 2017, net cash provided by financing activities was primarily related to net proceeds of \$74.3 million from credit facility borrowings and proceeds of \$24.9 million from sale leaseback transactions, partially offset by a \$18.0 million net decrease in book overdrafts and \$14.4 million of principle payments under capital lease obligations. Net cash provided by financing activities was \$11.4 million for the year ended December 31, 2016. In 2016, net cash provided by financing activities was primarily related to the issuance of the 2022 Notes with a principle amount of \$650.0 million, net proceeds of \$71.5 million from the issuance of common stock, and \$37.0 million from an increase in credit facility borrowings, partially offset by the redemption of the \$569.9 million outstanding balance of the 2017 Notes and \$170.4 million of the 2018 Notes.

As market conditions warrant and subject to our contractual restrictions, liquidity position, and other factors, we may from time to time seek to repurchase or retire our outstanding debt through cash purchases and/or exchanges for other debt or equity securities in open market transactions, privately negotiated transactions, by tender offer, or otherwise. Any such cash repurchases by us may be funded by cash on hand or incurring new debt. The amounts involved in any such transactions, individually or in the aggregate, may

be material. Furthermore, any such repurchases or exchanges may result in our acquiring and retiring a substantial amount of such indebtedness, which would impact the trading liquidity of such indebtedness.

Total Debt

Total debt at December 31, 2018 increased \$107.6 million to \$1,153.3 million from \$1,045.7 million at December 31, 2017 as a result of acquisitions and capital expenditures during the year, funded by the Ryerson Credit Facility.

Total debt outstanding as of December 31, 2018 consisted of the following amounts: \$535.9 million borrowing under the Ryerson Credit Facility, \$599.5 million under the 2022 Notes, \$19.5 million of foreign debt, and \$8.3 million of other debt, less \$9.9 million of unamortized debt issuance costs. Availability under the Ryerson Credit Facility was \$392 million and \$264 million at December 31, 2018 and December 31, 2017, respectively. Discussion of our outstanding debt follows.

Ryerson Credit Facility

On November 16, 2016, Ryerson entered into an amendment with respect to its \$1.0 billion revolving credit facility (as amended, the "Old Credit Facility"), to reduce the total facility size from \$1.0 billion to \$750 million, reduce the interest rate on outstanding borrowings by 25 basis points, reduce commitment fees on amounts not borrowed by 2.5 basis points, and to extend the maturity date to November 16, 2021. On June 28, 2018, Ryerson entered into a second amendment with respect to the Old Credit Facility to increase the facility size from \$750 million to \$1.0 billion (the Old Credit Facility as amended, the "Ryerson Credit Facility").

At December 31, 2018, Ryerson had \$535.9 million of outstanding borrowings, \$12 million of letters of credit issued, and \$392 million available under the Ryerson Credit Facility compared to \$384.2 million of outstanding borrowings, \$12 million of letters of credit issued, and \$264 million available at December 31, 2017. Total credit availability is limited by the amount of eligible accounts receivable, inventory, and qualified cash pledged as collateral under the agreement insofar as Ryerson is subject to a borrowing base comprised of the aggregate of these three amounts, less applicable reserves. Eligible accounts receivable, at any date of determination, is comprised of the aggregate value of all accounts directly created by a borrower (and in the case of Canadian accounts, the Canadian borrower) in the ordinary course of business arising out of the sale of goods or the rendering of services, each of which has been invoiced, with such receivables adjusted to exclude various ineligible accounts, including, among other things, those to which a borrower (or guarantor, as applicable) does not have sole and absolute title and accounts arising out of a sale to an employee, officer, director, or affiliate of a borrower (or guarantor, as applicable). Eligible inventory, at any date of determination, is comprised of the net orderly liquidation value of all inventory owned by a borrower (and in the case of Canadian accounts, the Canadian borrower). Qualified cash consists of cash in an eligible deposit account that is subject to customary restrictions and liens in favor of the lenders.

The Ryerson Credit Facility has an allocation of \$940 million to the Company's subsidiaries in the United States and an allocation of \$60 million to Ryerson Holding's Canadian subsidiary that is a borrower. Amounts outstanding under the Ryerson Credit Facility bear interest at (i) a rate determined by reference to (A) the base rate (the highest of the Federal Funds Rate plus 0.50%, Bank of America, N.A.'s prime rate, and the one-month LIBOR rate plus 1.00%), or (B) a LIBOR rate or, (ii) for Ryerson Holding's Canadian subsidiary that is a borrower, (A) a rate determined by reference to the Canadian base rate (the greatest of the Federal Funds Rate plus 0.50%, Bank of America-Canada Branch's "base rate" for commercial loans in U.S. Dollars made at its "base rate", and the 30 day LIBOR rate plus 1.00%), (B) the prime rate (the greater of Bank of America-Canada Branch's "prime rate" for commercial loans made by it in Canada in Canadian Dollars and the one-month Canadian bankers' acceptance rate plus 1.00%), or (C) the bankers' acceptance rate. The spread over the base rate and prime rate is between 0.25% and 0.50% and the spread over the LIBOR for the bankers' acceptances is between 1.25% and 1.50%, depending on the amount available to be borrowed under the Ryerson Credit Facility. Overdue amounts and all amounts owed during the existence of a default bear interest at 2% above the rate otherwise applicable thereto. Ryerson also pays commitment fees on amounts not borrowed at a rate of 0.23%.

We attempt to minimize interest rate risk exposure through the utilization of interest rate swaps, which are derivative financial instruments. During March 2017, we entered into an interest rate swap to fix interest on \$150 million of our floating rate debt under the Ryerson Credit Facility at a rate of 1.658% through March 2020. The swap has reset dates and critical terms that match our existing debt and the anticipated critical terms of future debt. The weighted average interest rate on the outstanding borrowings under the Ryerson Credit Facility including the interest rate swap was 3.5 percent and 2.8 percent at December 31, 2018 and 2017, respectively.

Borrowings under the Ryerson Credit Facility are secured by first-priority liens on all of the inventory, accounts receivables, lockbox accounts, and related assets of the borrowers and the guarantors.

The Ryerson Credit Facility also contains covenants that, among other things, restrict Ryerson Holding and its restricted subsidiaries with respect to the incurrence of debt, the creation of liens, transactions with affiliates, mergers and consolidations, sales of assets, and acquisitions. The Ryerson Credit Facility also requires that, if availability under the Ryerson Credit Facility declines to a certain level, Ryerson maintain a minimum fixed charge coverage ratio as of the end of each fiscal quarter, and includes defaults upon (among other things) the occurrence of a change of control of Ryerson and a cross-default to other financing arrangements.

The Ryerson Credit Facility contains events of default with respect to, among other things, default in the payment of principal when due or the payment of interest, fees, and other amounts due thereunder after a specified grace period, material misrepresentations, failure to perform certain specified covenants, certain bankruptcy events, the invalidity of certain security agreements or guarantees, material judgments, and the occurrence of a change of control of Ryerson. If such an event of default occurs, the lenders under the Ryerson Credit Facility will be entitled to various remedies, including acceleration of amounts outstanding under the Ryerson Credit Facility and all other actions permitted to be taken by secured creditors.

The lenders under the Ryerson Credit Facility could reject a borrowing request if any event, circumstance, or development has occurred that has had or could reasonably be expected to have a material adverse effect on the Company. If Ryerson Holding, JT Ryerson, any of the other borrowers, or any restricted subsidiaries of JT Ryerson becomes insolvent or commences bankruptcy proceedings, all amounts borrowed under the Ryerson Credit Facility will become immediately due and payable.

Net proceeds of short-term borrowings that are reflected in the Consolidated Statements of Cash Flows represent borrowings under the Ryerson Credit Facility with original maturities less than three months.

2022 Notes

On May 24, 2016, JT Ryerson issued \$650 million in aggregate principal amount of the 2022 Notes (the "2022 Notes"). The 2022 Notes bear interest at a rate of 11.00% per annum. The 2022 Notes are fully and unconditionally guaranteed on a senior secured basis by all of our existing and future domestic subsidiaries that are co-borrowers or that have guarantee obligations under the Ryerson Credit Facility.

The 2022 Notes and the related guarantees are secured by a first-priority security interest in substantially all of JT Ryerson's and each guarantor's present and future assets located in the United States (other than receivables, inventory, cash, deposit accounts and related general intangibles, certain other assets, and proceeds thereof), subject to certain exceptions and customary permitted liens. The 2022 Notes and the related guarantees are also secured on a second-priority basis by a lien on the assets that secure JT Ryerson's and the Company's obligations under the Ryerson Credit Facility.

The 2022 Notes will be redeemable, in whole or in part, at any time on or after May 15, 2019 at certain redemption prices. The redemption price for the 2022 Notes if redeemed during the twelve months beginning (i) May 15, 2019 is 105.50%, (ii) May 15, 2020 is 102.75%, and (iii) May 15, 2021 and thereafter is 100.00%. JT Ryerson may redeem some or all of the 2022 Notes before May 15, 2019 at a redemption price of 100.00% of the principal amount, plus accrued and unpaid interest, if any, to the redemption date, plus a "make-whole" premium. In addition, JT Ryerson may redeem up to 35% of the 2022 Notes before May 15, 2019 with respect to the 2022 Notes with the net cash proceeds from certain equity offerings at a price equal to 111.00%, with respect to the 2022 Notes, of the principal amount thereof, plus any accrued and unpaid interest, if any. JT Ryerson may be required to make an offer to purchase the 2022 Notes upon the sale of assets or upon a change of control.

The 2022 Notes contain customary covenants that, among other things, limit, subject to certain exceptions, our ability, and the ability of our restricted subsidiaries, to incur additional indebtedness, pay dividends on our capital stock or repurchase our capital stock, make investments, sell assets, engage in acquisitions, mergers or consolidations, create liens, or use assets as security in other transactions. Subject to certain exceptions, JT Ryerson may only pay dividends to Ryerson Holding to the extent of 50% of cumulative net income since the issuance of the 2022 Notes, once prior losses are offset.

During 2018, a principal amount of \$50.5 million of the 2022 Notes were repurchased for \$52.2 million and retired, resulting in the recognition of a \$1.7 million loss within other income and (expense), net on the Consolidated Statement of Operations.

The net proceeds from the issuance of the 2022 Notes, along with borrowings under the Ryerson Credit Facility, were used to (i) repurchase and/or redeem in full the \$569.9 million balance of JT Ryerson's 9.00% Senior Secured Notes due 2017 (the "2017 Notes"), plus accrued and unpaid interest thereon up to, but not including, the repayment date, (ii) repurchase \$95.0 million of JT Ryerson's 11.25% Senior Secured Notes due 2018 (the "2018 Notes"), and (iii) pay related fees, expenses, and premiums.

The Company applied the provisions of ASC 470-50, "Modifications and Extinguishments" in accounting for the issuance of the 2022 Notes, redemption of the 2017 Notes, and partial repurchase of the 2018 Notes. The evaluation of the accounting under ASC

470-50 was performed on a creditor by creditor basis in order to determine if the terms of the debt were substantially different and, as a result, whether to apply modification or extinguishment accounting. For the lenders where it was determined that the terms of the debt were not substantially different, modification accounting was applied. For the remaining lenders, extinguishment accounting was applied. In connection with this debt modification and extinguishment, the Company recorded a \$16.1 million loss within other income and (expense), net on the Consolidated Statement of Operations during 2016, primarily attributed to the costs incurred with third parties for arrangement fees, legal, and other services related to the modified debt, as well as redemption fees paid to the creditors, and unamortized debt issuance costs written off related to the extinguished debt. Additionally, the costs incurred with third parties for arrangement fees, legal, and other services related to the extinguished debt and redemption fees paid to the creditors related to the modified debt were capitalized and are being amortized over the life of the modified debt using the effective interest method.

During 2016, a principal amount of \$75.4 million of the 2018 Notes were repurchased for \$68.0 million and retired, resulting in the recognition of a \$7.4 million gain within other income and (expense), net on the Consolidated Statement of Operations. Including the \$16.1 million loss on the redemption of the \$569.9 million balance of the 2017 Notes and repurchase of \$95.0 million of the 2018 Notes, the Company recognized a total net loss of \$8.7 million within other income and (expense), net on the Consolidated Statement of Operations during year 2016.

Foreign Debt

At December 31, 2018, Ryerson China's total foreign borrowings were \$19.5 million, which were owed to banks in Asia at a weighted average interest rate of 4.3% per annum and secured by inventory and property, plant, and equipment. At December 31, 2017, Ryerson China's total foreign borrowings were \$21.3 million, which were owed to banks in Asia at a weighted average interest rate of 3.7% per annum and secured by inventory and property, plant, and equipment.

Availability under Ryerson China's credit facility was \$26 million and \$25 million at December 31, 2018 and December 31, 2017, respectively. Letters of credit issued by our foreign subsidiaries totaled \$3 million at December 31, 2018 and 2017.

Pension Funding

The Company made contributions of \$27.0 million in 2018, \$21.7 million in 2017, and \$22.1 million in 2016 to improve the Company's pension plans funded status. At December 31, 2018, as reflected in Note 10 to the Consolidated Financial Statements, pension liabilities exceeded plan assets by \$181 million. The Company anticipates that it will have a minimum required pension contribution of approximately \$26 million in 2019 under the Employee Retirement Income Security Act of 1974 ("ERISA"), Pension Protection Act in the U.S., and the Ontario Pension Benefits Act in Canada. Future contribution requirements depend on the investment returns on plan assets, the impact of discount rates on pension liabilities, and changes in regulatory requirements. The Company is unable to determine the amount or timing of any such contributions required by ERISA or whether any such contributions would have a material adverse effect on the Company's financial position or cash flows. The Company believes that cash flow from operations and the Ryerson Credit Facility described above will provide sufficient funds to make the minimum required contribution in 2019.

Income Tax Payments

The Company made income tax payments of \$2.1 million, \$1.7 million, and \$1.8 million in 2018, 2017, and 2016, respectively.

Off-Balance Sheet Arrangements

In the normal course of business with customers, vendors, and others, we have entered into off-balance sheet arrangements, such as letters of credit, which totaled \$15 million as of December 31, 2018. Additionally, other than normal course long-term operating leases included in the following Contractual Obligations table, we do not have any material off-balance sheet financing arrangements. None of these off-balance sheet arrangements are likely to have a material effect on our current or future financial condition, results of operations, liquidity, or capital resources.

Contractual Obligations

The following table presents contractual obligations at December 31, 2018:

			Payn	nents I	Due by Pe	eriod		
Contractual Obligations(1)(2)	 <u> Fotal</u>	Less th		y	- 3 ears illions)		- 5 ears	ofter 5 ears
2022 Notes	\$ 600	\$	_	\$	_	\$	600	\$ _
Ryerson Credit Facility	536				536		_	_
Foreign Debt	19		19		_		_	_
Other Debt	8		8		_		_	_
Interest on 2022 Notes, Foreign Debt, Other Debt, and Ryerson Credit Facility(3)	279		85		169		25	_
Purchase Obligations(4)	12		12		_			_
Operating Leases	102		22		36		24	20
Pension Withdrawal Liability	1		—				_	1
Capital Leases	34		14		17		3	_
Transition Tax Liability	 7		1		1		1	 4
Total	\$ 1,598	\$	161	\$	759	\$	653	\$ 25

⁽¹⁾ The contractual obligations disclosed above do not include our potential future pension funding obligations (see previous discussion under "Pension Funding" caption).

Capital Expenditures

Capital expenditures during 2018, 2017, and 2016 totaled \$38.4 million, \$25.1 million, and \$23.0 million, respectively. Capital expenditures were primarily for machinery and equipment.

The Company anticipates capital expenditures, excluding acquisitions, to be approximately \$35 million in 2019. The spending includes maintenance expenditures and improvements to maintain, upgrade, and add to the Company's North American processing capabilities.

Restructuring

2018

In 2018, the Company recorded a \$3.6 million charge for employee-related costs primarily for severance costs for corporate staff reductions and two facility closures. The Company paid \$3.2 million of the employee costs related to these actions. The remaining \$0.4 million of employee-related costs are expected to be paid in 2019.

During 2018, the Company also recorded a \$0.6 million charge to increase the reserve for tenancy-related costs for a facility closed in 2013. The Company paid \$0.8 million in costs related to this facility closure. The remaining \$1.5 million of tenancy-related costs are expected to be paid through 2025.

2017

In 2017, the Company recorded an \$0.8 million charge in warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations to increase the reserve for tenancy-related costs for a facility closed in 2013. The Company paid \$0.4 million in costs related to this facility closure and also reclassified an existing \$0.1 million liability for future lease payments to the restructuring reserve. In addition, the Company paid \$0.1 million in costs related to a facility closed in 2016.

⁽²⁾ Due to uncertainty regarding the completion of tax audits and possible outcomes, we do not know the timing of when our obligations related to unrecognized tax benefits will occur, if at all. See Note 17 "Income Taxes" of the notes to our consolidated financial statements for additional detail.

⁽³⁾ Interest payments related to the variable rate debt were estimated using the weighted average interest rate for the Ryerson Credit Facility, including the effect of the interest rate swap.

⁽⁴⁾ The purchase obligations with suppliers are entered into when we receive firm sales commitments with certain of our customers.

During 2017, the Company recorded a \$0.2 million reduction to the reserve for employee-related costs and credited warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations. This action fully utilized the remaining reserve for employee-related costs.

2016

In 2016, the Company recorded a charge of \$1.0 million related to a facility closure, which consists of tenancy-related costs, primarily future lease payments. The Company paid \$0.2 million in costs related to this facility closure and also reclassified an existing \$0.2 million liability for future lease payments at this facility to the restructuring reserve. The Company also paid \$0.3 million in costs related to a facility closed in 2013 and recorded an addition of \$0.1 million to the reserve for tenancy-related costs, which was charged to warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations.

During 2016, the Company paid \$0.7 million in employee-related costs related to restructuring actions taken in the fourth quarter of 2015. The Company also recorded a \$0.3 million reduction to the reserve for employee-related costs and credited warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations.

Deferred Tax Amounts

At December 31, 2018, the Company had a net deferred tax liability of \$13 million comprised primarily of a deferred tax asset of \$48 million related to pension liabilities, a deferred tax asset related to postretirement benefits other than pensions of \$18 million, \$30 million of Alternative Minimum Tax ("AMT") credit carryforwards, and deferred tax assets of \$71 million related to federal, local, and foreign tax loss carryforwards, offset by a valuation allowance of \$29 million and deferred tax liabilities of \$65 million related to fixed assets and \$127 million related to inventory. The Company's deferred tax assets include \$46 million related to U.S. federal net operating loss ("NOL") carryforwards, \$20 million related to state NOL carryforwards, and \$5 million related to foreign NOL carryforwards, available at December 31, 2018.

The U.S. Tax Cuts and Jobs Act (the "Act"), enacted on December 22, 2017, significantly changed U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018 and creating a territorial tax system with a one-time mandatory tax on previously deferred foreign earnings of U.S. subsidiaries. Under ASC Topic 740, "Income Taxes" the effects of changes in tax rates and laws on deferred tax balances are recognized in the period in which the new legislation is enacted. As a result of the Act, we recorded a benefit for the revaluation of our deferred tax assets of \$10.6 million during the fourth quarter of 2017 within the provision (benefit) for income taxes line of the Consolidated Statement of Operations.

In accordance with ASC 740 the Company assesses the realizability of its deferred tax assets. The Company records a valuation allowance when, based upon the evaluation of all available evidence, it is more-likely-than-not that all or a portion of the deferred tax assets will not be realized. In making this determination, we analyze, among other things, our recent history of earnings, the nature and timing of reversing book-tax temporary differences, tax planning strategies, and future income. After considering both the positive and negative evidence available, in the second quarter of 2009, the Company determined that it was more-likely-than-not that it would not realize a portion of its U.S. deferred tax assets. As a result, the Company established a valuation allowance against a portion of its U.S. deferred tax assets. The Company released a portion of the valuation allowance related to one of its U.S. subsidiaries, JT Ryerson, during 2012. The Company released most of the remaining U.S. related valuation allowance during 2013. In 2018, the Company further reduced its valuation allowance related to state and foreign net operating losses. As of December 31, 2017, the Company had a valuation allowance of \$24.4 million. As of December 31, 2018, the Company had a valuation allowance of \$29.3 million, an increase of \$4.9 million from the prior year mainly related to changes in foreign deferred tax assets, U.S. foreign tax credits, and state net operating losses subject to valuation allowances.

As described in Note 1 to the Consolidated Financial Statements, the Company assesses the need for a valuation allowance considering all available positive and negative evidence, including past operating results, projections of future taxable income, and the feasibility of ongoing tax planning strategies.

The Company will continue to maintain a valuation allowance on certain U.S. federal and state deferred tax assets until such time as in management's judgment, considering all available positive and negative evidence, the Company determines that these deferred tax assets are more likely than not realizable.

Critical Accounting Estimates

Preparation of this Form 10-K requires us to make estimates and assumptions that affect the reported amount of assets and liabilities, disclosure of contingent assets and liabilities at the date of our financial statements, and the reported amounts of sales and expenses during the reporting period. Our critical accounting policies, including the assumptions and judgments underlying them, are

disclosed in Item 8 within Note 1: "Summary of Accounting and Financial Policies". These policies have been consistently applied and address such matters as revenue recognition, depreciation methods, inventory valuation, asset impairment recognition, and pension and postretirement expense. While policies associated with estimates and judgments may be affected by different assumptions or conditions, we believe our estimates and judgments associated with the reported amounts are appropriate in the circumstances. Actual results may differ from those estimates.

We consider the policies discussed below as critical to an understanding of our financial statements, as application of these policies places the most significant demands on management's judgment, with financial reporting results relying on estimation of matters that are uncertain.

Provision for allowances, claims, and doubtful accounts: We perform ongoing credit evaluations of customers and set credit limits based upon review of the customers' current credit information and payment history. We monitor customer payments and maintain a provision for estimated credit losses based on historical experience and specific customer collection issues that we have identified. Estimation of such losses requires adjusting historical loss experience for current economic conditions and judgments about the probable effects of economic conditions on certain customers. We cannot guarantee that the rate of future credit losses will be similar to past experience. Provisions for allowances and claims are based upon historical rates, expected trends, and estimates of potential returns, allowances, customer discounts, and incentives. We consider all available information when assessing the adequacy of the provision for allowances, claims, and doubtful accounts.

Inventory valuation: Our inventories are stated at the lower of cost or market. The valuation of our inventories at the lower of cost or market could be subject to certain estimates; however the measurement is primarily based on historical purchasing and sales information rather than forecasted metals pricing. Inventory costs reflect metal and in-bound freight purchase costs, third-party processing costs, and internal direct and allocated indirect processing costs. Cost is primarily determined by the LIFO method. We regularly review inventory on hand and record provisions for obsolete and slow-moving inventory based on historical and current sales trends. Changes in product demand and our customer base may affect the value of inventory on hand which may require higher provisions for obsolete inventory.

Income Taxes: Our income tax expense, deferred tax assets and liabilities, and reserve for uncertain tax positions reflect our best estimate of taxes to be paid. The Company is subject to income taxes in the U.S. and several foreign jurisdictions. The determination of the consolidated income tax expense requires judgment and estimation by management. It is possible that actual results could differ from the estimates that management has used to determine its consolidated income tax expense.

We record operating loss and tax credit carryforwards and the estimated effect of temporary differences between the tax basis of assets and liabilities and the reported amounts in the Consolidated Balance Sheet. We follow detailed guidelines in each tax jurisdiction when reviewing tax assets recorded on the balance sheet and provide for valuation allowances as required. Deferred tax assets are reviewed for recoverability based on historical taxable income, the expected reversals of existing temporary differences, tax planning strategies, and on forecasts of future taxable income. The forecasts of future taxable income require assumptions regarding volume, selling prices, margins, expense levels, and industry cyclicality. If we are unable to generate sufficient future taxable income in certain tax jurisdictions, we may be required to record additional valuation allowances against our deferred tax assets related to those jurisdictions.

The Company's income tax provisions are based on calculations and assumptions that are subject to examination by the IRS and other tax authorities. Although the Company believes that the positions taken on filed tax returns are reasonable, it has established tax and interest reserves in recognition that various taxing authorities may challenge the positions taken. For uncertain tax positions, the Company applies the provisions of relevant authoritative guidance, which requires application of a "more likely than not" threshold to the recognition and derecognition of tax positions. The Company's ongoing assessments of the more likely than not outcomes of tax authority examinations and related tax positions require significant judgment and can increase or decrease the Company's effective tax rate.

Long-lived Assets and Other Intangible Assets: Long-lived assets held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. We estimate the future cash flows expected to result from the use of the asset and its eventual disposition. If the sum of the expected future cash flows (undiscounted and without interest charges) is less than the carrying amount of the asset, an impairment is recognized. Determining whether an impairment has occurred typically requires various estimates and assumptions, including determining which undiscounted cash flows are directly related to the potentially impaired asset, the useful life over which cash flows will occur, their amount, and the asset's residual value, if any. Any related impairment loss is calculated based upon comparison of the fair value to the carrying value of the asset. Separate intangible assets that have finite useful lives are amortized over their useful lives. An impaired long-lived or intangible asset would be written down to fair value, based on various available valuation techniques, including the discounted cash flow method.

Goodwill: We assess the recoverability of the carrying value of recorded goodwill annually in the fourth quarter of each year or whenever indicators of potential impairment exist. We test for impairment of goodwill by assessing various qualitative factors with respect to developments in our business and the overall economy and calculating the fair value of a reporting unit using the discounted cash flow method, as necessary. Factors that may be considered indicators of impairment include: deterioration in general economic conditions; declines in the market conditions of our products, including metals prices; a sustained significant decline in our share price and market capitalization; reduced future cash flow estimates; and slower growth rates in our industry, among others. If we determine that it is more likely than not that the fair value of a reporting unit is less than the carrying value based on our qualitative assessment, we will proceed to the goodwill impairment test. We compare the fair value of the reporting unit in which goodwill resides to its carrying value. If the carrying amount exceeds the fair value, an impairment loss is recognized in an amount equal to that excess, not to exceed the carrying amount of the goodwill. The fair value of the reporting units is estimated using a combination of an income approach and a market approach as this combination is deemed to be the most indicative of our fair value in an orderly transaction between market participants. An income approach based on discounted future cash flows requires us to estimate income from operations based on projected results and discount rates based on a weighted average cost of capital of comparable companies. A market approach estimates fair value using market multiples of various financial measures of comparable public companies. If these estimates or their related assumptions for commodity prices and demand change in the future, we may be required to record impairment charges for these assets.

Based on the impairment test performed as of October 1, 2015, the reporting unit's fair value exceeded its carrying value by more than 25%. Based on a qualitative assessment performed as of October 1, 2018, the Company concluded it was not more likely than not that the fair value of the reporting unit was less than its carrying amount. Therefore, we did not perform the quantitative goodwill impairment test during 2018. The discount rate for the reporting unit was estimated to be 14.5% at October 1, 2018. The Company determines a discount rate based on an estimate of a reasonable risk-adjusted return an investor would expect to realize on an investment in the reporting unit. Deterioration in market conditions in our industry or products, changes in expected future cash flows, expected growth rates, or discount rates could result in impairment charges in future periods.

Purchase Price Accounting: Business combinations are accounted for using the acquisition method of accounting. This method requires the Company to record assets and liabilities of the business acquired at their estimated fair market values as of the acquisition date. Any excess of the cost of the acquisition over the fair value of the net assets acquired is recorded as goodwill. The Company uses valuation specialists, where necessary, to perform appraisals and assist in the determination of the fair values of the assets acquired and liabilities assumed. These valuations require management to make estimates and assumptions that are critical in determining the fair values of the assets and liabilities.

Pension and postretirement benefit plan assumptions: We sponsor various benefit plans covering a portion of our employees for pension and postretirement medical costs. Statistical methods are used to anticipate future events when calculating expenses and liabilities related to the plans. The statistical methods include assumptions about, among other things, the discount rate, expected return on plan assets, rate of increase of health care costs, and the rate of future compensation increases. Our actuarial consultants also use subjective factors such as withdrawal and mortality rates when estimating expenses and liabilities. The discount rate used for U.S. plans reflects the market rate for high-quality fixed-income investments on our annual measurement date (December 31) and is subject to change each year. The discount rate was determined by matching, on an approximate basis, the coupons and maturities for a portfolio of corporate bonds (rated Aa or better by Moody's Investor Services or AA or better by Standard and Poor's) to the expected plan benefit payments defined by the projected benefit obligation. The discount rates used for plans outside the U.S. are based on the yield of long term high quality corporate bonds, the duration of the liability, and appropriate judgment.

When calculating pension expense for 2018, we assumed the pension plans' assets would generate a long-term rate of return of 6.70% for the JT Ryerson plan and 4.70% for the CS&W plan, and between 4.50% and 5.25% for the Canadian plans. The expected long-term rate of return assumption was developed based on historical experience and input from the trustee managing the plans' assets. The expected long-term rate of return on plan assets is based on a target allocation of assets, which is based on a goal of earning the highest rate of return while maintaining risk at acceptable levels. Our projected long-term rate of return for the JT Ryerson pension plan is slightly higher than some market indices due to the active management of our plans' assets, and is supported by the historical returns on our plans' assets. The plans strive to have assets sufficiently diversified so that adverse or unexpected results from one security class will not have an unduly detrimental impact on the entire portfolio. We regularly review actual asset allocation and the pension plans' investments are periodically rebalanced to the targeted allocation when considered appropriate. Pension expense increases as the expected rate of return on plan assets decreases. Lowering the expected long-term rate of return on plan assets by 50 basis points would have increased 2018 pension expense by approximately \$3 million.

Future pension obligations for the U.S. plans were discounted using rates between of 4.32% and 4.59% at December 31, 2018. Future pension obligations for the Canadian plans were discounted using weighted average rates between 3.56% and 3.58% at December 31, 2018. Lowering the discount rate by 50 basis points would increase the pension liability at December 31, 2018 by approximately \$42 million.

The calculation of other postretirement benefit expense and obligations requires the use of a number of assumptions, including the assumed discount rate for measuring future payment obligations and the health care cost trend rate. A one percentage point increase (decrease) in assumed health care trend rates would increase (decrease) our total service and interest cost for the year ended December 31, 2018 by \$0.2 million and \$(0.2) million, respectively. A decrease in the weighted average discount rate of 50 basis points would increase the postretirement benefit liability by approximately \$3 million.

The assumptions used in the actuarial calculation of expenses and liabilities may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates, or longer or shorter life spans of participants. These differences may result in a significant impact on the amount of pension or postretirement benefit expense we may record in the future.

Legal contingencies: We are involved in a number of legal and regulatory matters including those discussed in Note 11 in the Consolidated Financial Statements. We determine whether an estimated loss from a loss contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. We analyze our legal matters based on available information to assess potential liability. We consult with outside counsel involved in our legal matters when analyzing potential outcomes. We cannot determine at this time whether any potential liability related to this litigation would materially affect our financial position, results of operations, or cash flows.

Recent Accounting Pronouncements

Recent accounting pronouncements are discussed within Note 1 in the Consolidated Financial Statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Interest rate risk

Market risk is the potential loss arising from adverse changes in market rates and prices, such as interest rates. We are exposed to market risk related to our fixed-rate and variable-rate long-term debt. Changes in interest rates may affect the market value of our fixed-rate debt. The estimated fair value of our long-term debt and the current portions thereof using quoted market prices of Company debt securities recently traded and market-based prices of similar securities for those securities not recently traded was \$1,158.5 million at December 31, 2018 and \$1,125.9 million at December 31, 2017 as compared with the carrying value of \$1,153.3 million and \$1,045.7 million at December 31, 2018 and 2017, respectively.

We have a receive variable, pay fixed, interest rate swap to manage the exposure to variable interest rates of the Ryerson Credit Facility. In March 2017, we entered into a forward agreement for \$150 million of "pay fixed" interest at 1.658%, "receive variable" interest to manage the risk of increasing variable interest rates. We account for the interest rate swap as a cash flow hedge of floating-rate borrowings with changes in fair value being recorded in accumulated other comprehensive income. The fair value of the interest rate swap as of December 31, 2018 was an asset of \$1.5 million.

A hypothetical 1% increase in interest rates on variable rate debt would have increased interest expense in 2018 by approximately \$4.0 million.

Foreign exchange rate risk

We are subject to exposure from fluctuations in foreign currencies. We use foreign currency exchange contracts to hedge variability in cash flows when a payment currency is different from our functional currency. Foreign currency contracts are principally used to purchase U.S. dollars. We had foreign currency contracts with a U.S. dollar notional amount of \$4.5 million outstanding at December 31, 2018 and a net asset value of \$0.2 million. We do not currently account for these contracts as hedges but rather mark these contracts to market with a corresponding offset to current earnings. For the year ended December 31, 2018, the Company recognized a gain of \$0.2 million associated with its foreign currency contracts. A hypothetical strengthening or weakening of 10% in the foreign exchange rates underlying the foreign currency contracts from the market rate as of December 31, 2018 would decrease or increase the fair value of the foreign currency contracts by \$0.2 million and \$0.1 million, respectively.

The currency effects of translating the financial statements of our foreign subsidiaries are included in accumulated other comprehensive loss and will not be recognized in the statement of operations until there is a liquidation or sale of those foreign subsidiaries.

Commodity price risk

Metal prices can fluctuate significantly due to several factors including changes in foreign and domestic production capacity, raw material availability, metals consumption, and foreign currency rates. Declining metal prices could reduce our revenues, gross profit, and net income. From time to time, we may enter into fixed price sales contracts with our customers for certain of our inventory components. We may enter into metal commodity futures and options contracts to reduce volatility in the price of these metals.

As of December 31, 2018, we had 1,541 tons of nickel swap contracts, 36,365 tons of hot roll coil swap contracts, and 42,419 tons of aluminum swap contracts, with a net liability value of \$0.6 million, \$0.1 million, and \$3.1 million, respectively. We do not currently account for these contracts as hedges, but rather mark these contracts to market with a corresponding offset to current earnings. For the year ended December 31, 2018, the Company recognized a loss of \$3.1 million associated with its metal commodity derivatives.

A hypothetical strengthening or weakening of 10% in the commodity prices underlying the commodity derivative contracts from the market rate as of December 31, 2018 would increase or decrease the fair value of the commodity derivative contracts by \$3.7 million.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

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All other schedules are omitted because they are not applicable. The required information is shown in the Financial Statements or	
Notes thereto.	

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Ryerson Holding Corporation ("the Company") is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control system was designed to provide reasonable assurance to the Company's management and Board of Directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements under all potential conditions. Therefore, effective internal control over financial reporting provides only reasonable, and not absolute, assurance with respect to the preparation and presentation of financial statements.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Based on its assessment under that framework and the criteria established therein, the Company's management concluded that the Company's internal control over financial reporting was effective as of December 31, 2018. Management's assessment and conclusion on the effectiveness of internal control over financial reporting as of December 31, 2018 excludes the internal control over financial reporting related to Central Steel and Wire Company (acquired on July 2, 2018). Central Steel and Wire Company is included in the 2018 consolidated financial statements and constituted 13.2% and 4.9% of total assets and total liabilities, respectively, as of December 31, 2018 and 7.9% and 7.3% of net sales and pre-tax income, respectively, for the year then ended.

Ernst & Young LLP, an independent registered public accounting firm, has audited the Company's internal control over financial reporting as of December 31, 2018, as stated in their report, which is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders' and the Board of Directors of Ryerson Holding Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Ryerson Holding Corporation and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and financial statement schedules listed in the Index at 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2006.

Chicago, Illinois March 5, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders' and the Board of Directors of Ryerson Holding Corporation

Opinion on Internal Control over Financial Reporting

We have audited Ryerson Holding Corporation and subsidiaries' internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Ryerson Holding Corporation and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of the Central Steel and Wire Company, which is included in the 2018 consolidated financial statements of the Company and constituted 13.2% and 4.9% of total assets and total liabilities, respectively as of December 31, 2018 and 7.9% and 7.3% of net sales and pre-tax income, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Central Steel and Wire Company.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2018 consolidated financial statements of the Company and our report dated March 5, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Chicago, Illinois March 5, 2019

CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except per share data)

	 Y	ear End	led December 3	31,	
	 2018		2017		2016
Net sales	\$ 4,408.4	\$	3,364.7	\$	2,859.7
Cost of materials sold	 3,650.3		2,782.2		2,289.1
Gross profit	758.1		582.5		570.6
Warehousing, delivery, selling, general, and administrative	614.7		481.4		447.5
Restructuring and other charges	 4.2		<u> </u>		1.0
Operating profit	139.2		101.1		122.1
Other expense:					
Other income and (expense), net	76.7		6.6		(6.1)
Interest and other expense on debt	 (99.2)		(91.0)		(89.9)
Income before income taxes	116.7		16.7		26.1
Provision (benefit) for income taxes	 10.3		(1.3)		7.2
Net income	106.4		18.0		18.9
Less: Net income attributable to noncontrolling interest	 0.4		0.9		0.2
Net income attributable to Ryerson Holding					
Corporation	\$ 106.0	\$	17.1	\$	18.7
Basic earnings per share	\$ 2.84	\$	0.46	\$	0.55
Diluted earnings per share	\$ 2.81	\$	0.46	\$	0.54

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In millions)

	Year Ended December 31,						
	2	018		2017		2016	
Net income	\$	106.4	\$	18.0	\$	18.9	
Other comprehensive income (loss), before tax:							
Foreign currency translation adjustments		(8.2)		5.6		1.1	
Gain (loss) on intra-entity foreign currency transactions		(3.0)		3.2		1.3	
Unrealized loss on equity securities		_		(0.3)		(1.8)	
Other-than-temporary impairment on equity securities				0.2		4.7	
Liquidation of investment in foreign entity		_		_		1.3	
Gain on cash flow hedges		0.5		1.0		_	
Changes in defined benefit pension and other							
post-retirement benefit plans		(22.3)		18.0		(10.6)	
Other comprehensive income (loss), before tax	· · · · · · · · · · · · · · · · · · ·	(33.0)		27.7		(4.0)	
Income tax provision (benefit) related to items of other							
comprehensive income (loss)		(4.5)		6.0		(3.3)	
Comprehensive income, after tax		77.9		39.7		18.2	
Less: Comprehensive income attributable to the							
noncontrolling interest		0.4		1.1		0.3	
Comprehensive income attributable to Ryerson							
Holding Corporation	\$	77.5	\$	38.6	\$	17.9	

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)

1 (11)	nimons)					
		2010	Year Ended December 31,	2016		
Operating activities:		2018	2017	2016		
Net income	\$	106.4	\$ 18.0	\$ 18.9		
Adjustments to reconcile net income to net cash provided by	φ	100.4	φ 16.0	3 16.9		
(used in) operating activities:						
Depreciation and amortization		52.9	47.1	42.5		
Stock-based compensation		3.3	2.2	1.4		
Deferred income taxes		7.8	(9.2)			
Provision for allowances, claims, and doubtful accounts		3.7	1.5	3.1		
Restructuring and other charges		4.2	_	1.0		
Other-than-temporary impairment charge on equity securities		_	0.2	4.7		
Gain on bargain purchase		(70.0)	_	_		
Loss on retirement of debt		1.7	_	8.7		
Premium and fees paid related to debt modification		_	_	(15.7)		
Non-cash (gain) loss from derivatives		2.7	3.0	(5.4)		
Liquidation of investment in foreign entity		_	_	1.2		
Other items		(0.5)	(0.7)			
Change in operating assets and liabilities, net of effects of acquisitions:		(010)	(411)	-		
Receivables		(64.8)	(44.0)	(22.5)		
Inventories		(21.4)	(42.9)	, ,		
Other assets		(7.3)	(8.3)			
Accounts payable		58.4	58.1	20.4		
Accrued liabilities		16.8	4.6	(5.2)		
Accrued taxes payable/receivable		2.2	6.3	1.2		
Deferred employee benefit costs		(38.7)	(38.4)	(40.7)		
Net adjustments		(49.0)	(20.5)	5.9		
Net cash provided by (used in) operating activities		57.4	(2.5)	24.8		
Investing activities:		37.4	(2.3)			
Acquisitions, net of cash acquired		(160.7)	(49.2)			
Capital expenditures		(169.7)	(25.1)			
Proceeds from sale of property, plant, and equipment		5.9	3.8	3.2		
Proceeds from insurance settlement		2.0	3.6 —	5.2		
Other investing activities		2.0	0.2			
6		(200.2)				
Net cash used in investing activities		(200.2)	(70.3)	(19.8)		
Financing activities:				71. ř		
Net proceeds from issuance of common stock		_	_	71.5		
Long-term debt issued		— — — — — — — — — — — — — — — — — — —	-	650.0		
Repayment of debt		(52.4)	(0.2)			
Net proceeds of short-term borrowings		149.9	74.3	37.0		
Purchase of subsidiary shares from noncontrolling interest		(0.2)	_			
Credit facility issuance costs		(0.6)	=	(1.3)		
Net increase (decrease) in book overdrafts		6.3	(18.0)			
Long-term debt issuance costs		(12.5)	=	(5.2)		
Principal payments on capital lease obligations		(13.7)	(14.4)			
Contingent payment related to acquisitions		(0.9)	(0.9)	(1.0)		
Proceeds from sale leaseback transactions		4.5	24.9	_		
Contributions from non-controlling interest				0.4		
Net cash provided by financing activities		92.9	65.7	11.4		
Net increase (decrease) in cash, cash equivalents, and restricted cash		(49.9)	(7.1)	16.4		
Effect of exchange rate changes on cash, cash equivalents, and restricted cash		(4.3)	3.9	0.9		
Net change in cash, cash equivalents, and restricted cash		(54.2)	(3.2)	17.3		
Cash, cash equivalents, and restricted cash—beginning of period		78.5	81.7	64.4		
Cash, cash equivalents, and restricted cash—end of period	\$	24.3	\$ 78.5	\$ 81.7		
Supplemental disclosures:						
Cash paid during the period for:						
Interest paid to third parties	\$	92.8	\$ 84.9	\$ 89.2		
Income taxes, net		2.1	1.7	1.8		
Noncash investing activities:						
Asset additions under capital leases and sale-leasebacks	\$	12.9	\$ 42.8	\$ 5.3		

CONSOLIDATED BALANCE SHEETS (In millions, except shares)

	At December 31,			
	2018		2017	
Assets				
Current assets:				
Cash and cash equivalents	\$ 23.2	\$	77.4	
Restricted cash (Note 3)	1.1		1.1	
Receivables less provisions of \$2.5 in 2018 and \$4.9 in 2017	521.0		376.3	
Inventories (Note 4)	806.3		616.5	
Prepaid expenses and other current assets	 61.5		32.6	
Total current assets	1,413.1		1,103.9	
Property, plant, and equipment, net of accumulated depreciation (Note 5)	489.0		422.9	
Deferred income taxes (Note 17)			17.9	
Other intangible assets (Note 6)	58.1		46.9	
Goodwill (Note 7)	120.3		115.3	
Deferred charges and other assets	 5.8		5.0	
Total assets	\$ 2,086.3	\$	1,711.9	
Liabilities				
Current liabilities:				
Accounts payable	\$ 390.2	\$	275.0	
Accrued liabilities:				
Salaries, wages, and commissions	66.6		40.3	
Interest on debt	9.9		10.0	
Other accrued liabilities	67.1		48.4	
Short-term debt (Note 9)	27.3		21.3	
Current portion of deferred employee benefits	7.9		7.7	
Total current liabilities	569.0		402.7	
Long-term debt (Note 9)	1,126.0		1,024.4	
Deferred employee benefits (Note 10)	258.4		243.5	
Other noncurrent liabilities	57.0		48.7	
Total liabilities	2,010.4		1,719.3	
Commitments and contingencies (Note 11)				
Equity				
Ryerson Holding Corporation stockholders' equity (deficit):				
Preferred stock, \$0.01 par value; 7,000,000 shares authorized and no shares issued at 2018 and 2017	_		_	
Common stock, \$0.01 par value; 100,000,000 shares authorized and 37,656,505 shares issued at 2018; 100,000,000 shares authorized and 37,421,081 issued at				
2017	0.4		0.4	
Capital in excess of par value	381.0		377.6	
Retained earnings (accumulated deficit)	14.2		(95.1)	
Treasury stock at cost – Common stock of 212,500 shares in 2018 and 2017	(6.6)		(6.6)	
Accumulated other comprehensive loss	 (315.8)		(286.3)	
Total Ryerson Holding Corporation stockholders' equity (deficit)	73.2		(10.0)	
Noncontrolling interest	2.7		2.6	
Total equity (deficit)	75.9		(7.4)	
Total liabilities and equity	\$ 2,086.3	\$	1,711.9	

RYERSON HOLDING CORPORATION AND SUBSIDIARY COMPANIES CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In millions, except shares in thousands)

						Holding Corpo	except snare		Jusanus	''					
					Kyersor	i Holding Corpo			her Comp	rehensive Ir	ncome (l	Loss)			
	Com: Sto	ck	Treas Sto	ck	Capital in Excess of Par Value	Retained Earnings (Accumulated Deficit)	Foreign Currency Translation	Liabi		Unrealiz Gain (Los Equity Securiti	s) on y ies	Cash Flow Hedge - Interest Rate Swap	Non- controlling Interest	Total Equity	Redeemable Non- controlling Interest
Palanas at	Shares	<u>Dollars</u>	Shares	Dollars	Dollars	Dollars	<u>Dollars</u>	Dol	lars	Dollar	S	Dollars	Dollars	Dollars	
Balance at January 1,															
2016	32,312	\$ 0.3	213	\$ (6.6)	\$ 302.6	\$ (130.9)	\$ (53.8)	\$ (252.5)	\$	(0.7)	\$ —	\$ 0.7	\$(140.9)	\$ 0.1
Net income															
(loss)	_		_		_	18.7	_		_		_	_	0.8	19.5	(0.6)
Foreign currency translation	_	_	_	_	_	_	1.1		_		_	_	_	1.1	_
Gain on intra- entity foreign currency															
transactions	_	_	_	_	_	_	1.3		_		_	_	_	1.3	_
Changes in defined benefit pension and other post- retirement benefit plans, net of tax of															
\$4.4	_	_	_	_	_	_	_		(6.2)		_	_	_	(6.2)	_
Unrealized loss on equity securities, net															
of tax of \$0.7					_	_	_		_		(1.1)	_	_	(1.1)	_
Other-than- temporary impairment, net of tax of \$1.8	_	_	_	_	_	_	_		_		2.9	_	_	2.9	_
Stock-based															
compensation expense Issuance of	33	_	_	_	1.4	_	_		_		_			1.4	_
common stock	5,000	0.1	_	_	71.4	_	_		_		_	_	_	71.5	_
Contributions from non- controlling interest			_	_		_	_					_	_		0.4
Liquidation of															0.1
investment in															
foreign entity							1.2							1.2	0.1
Balance at															
December 31, 2016	37,345	\$ 0.4	213	\$ (6.6)	\$ 375.4	\$ (112.2)	\$ (50.2)	\$ (258.7)	\$	1.1	\$ —	\$ 1.5	\$ (49.3)	\$ —
Net income		_	_	`-	_	17.1	` _ ´		_		_	_	0.9	18.0	_
Foreign currency translation							5.4						0.2	5.6	
Gain on intra- entity foreign							3.4						0.2	5.0	
currency transactions	_	_	_	_	_	_	3.2		_		_	_	_	3.2	_
Changes in defined benefit pension and other post- retirement benefit plans, net of tax of \$5.6	_	_	_	_	_		_		12.4		_	_	_	12.4	_
Unrealized loss on equity securities, net									-3					12.1	

0. 0.00										(0.2)			(0.0)	
of tax of \$0.1 Other-than-	_	_	_	_	_	_	_	_		(0.2)	_	_	(0.2)	
temporary impairment,														
net of tax of \$0.1	_	_	_	_	_	_	_	_		0.1	_	_	0.1	
Stock-based compensation														
expense Cash flow	76	_	_	_	2.2	-	_	_		_	_	_	2.2	_
hedge - interest rate swap, net of tax of \$0.4											0.6		0.6	
Balance at December 31,									· · · · · · · · · · · · · · · · · · ·		0.0			
2017 Net income	37,421	\$ 0.4	213	\$ (6.6) \$	377.6 \$	(95.1) \$ 106.0	(41.6)	\$ (246.3) \$	1.0	\$ 0.6 \$	2.6 \$ 0.4	(7.4) \$ 106.4	_
Foreign		_		_	_	100.0						0.4	100.4	_
currency translation	_	_	_	_	_	_	(8.2)	_		_	_	_	(8.2)	_
Loss on intra- entity foreign currency														
transactions	_	_	_	_	_		(3.0)	_		_	_	_	(3.0)	_
Changes in defined benefit pension and other post-retirement benefit plans, net of tax of \$4.6	_	_	_	_	_	_	_	(17.7)	_	_	_	(17.7)	_
Adoption of accounting principal ASU								(2111	,				(2,11)	
2016-01	_	_	_	_	_	1.0	_	_		(1.0)	_	_	_	
Adoption of accounting principal ASC 606, net of tax														
of \$0.7 Stock-based	_	_	_	_	_	2.3	_	_		_	_	_	2.3	_
expense	235	_	_	_	3.3	_	_	_			_	_	3.3	_
Purchase of subsidiary shares from noncontrolling interest	_	_	_	_	0.1	_	_	_		_	_	(0.3)	(0.2)	_
Cash flow hedge - interest rate swap, net of tax of \$0.1	_	_	_	_	_	_	_			<u>_</u>	0.4		0.4	
Balance at December 31,	37,656	\$ 0.4	213	\$ (6.6) \$	381.0 \$	14.2 \$	(52.8)	\$ (264.0) \$	_	\$ 1.0 \$	2.7 \$	75.9 \$	_

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1: Summary of Accounting and Financial Policies

Business Description and Basis of Presentation. Ryerson Holding Corporation ("Ryerson Holding"), a Delaware corporation, is the parent company of Joseph T. Ryerson & Son, Inc. ("JT Ryerson"), a Delaware corporation. Affiliates of Platinum Equity, LLC ("Platinum") own approximately 21,037,500 shares of our common stock, which is approximately 56% of our issued and outstanding common stock. We are a leading value-added processor and distributor of industrial metals with operations in the United States through JT Ryerson, in Canada through our indirect wholly-owned subsidiary Ryerson Canada, Inc., a Canadian corporation ("Ryerson Canada"), and in Mexico through our indirect wholly-owned subsidiary Ryerson Metals de Mexico, S. de R.L. de C.V., a Mexican corporation ("Ryerson Mexico"). In addition to our North American operations, we conduct materials processing and distribution operations in China through an indirect wholly-owned subsidiary, Ryerson China Limited ("Ryerson China"). Unless the context indicates otherwise, Ryerson Holding, JT Ryerson, Ryerson Canada, Ryerson China, and Ryerson Mexico together with their subsidiaries, are collectively referred to herein as "Ryerson," "we," "us," "our," or the "Company."

Principles of Consolidation. The Company consolidates entities in which it owns or controls more than 50% of the voting shares. All significant intercompany balances and transactions have been eliminated in consolidation.

Business Segments. Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 280, "Segment Reporting" ("ASC 280"), establishes standards for reporting information on operating segments in interim and annual financial statements. Our Chief Executive Officer, together with our Board of Directors, serve as our Chief Operating Decision Maker ("CODM"). Our CODM reviews our financial information for purposes of making operational decisions and assessing financial performance. The CODM views our business globally as metals service centers. We have one operating and reportable segment, metal service centers, in accordance with the criteria set forth in ASC 280.

Use of Estimates. The preparation of financial statements in conformity with Generally Accepted Accounting Principles ("GAAP") in the United States requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and related notes to the financial statements. Changes in such estimates may affect amounts reported in future periods.

Reclassifications. Certain amounts in the 2017 and 2016 financial statements, as previously reported, have been revised to conform to the 2018 presentation. These changes did not have a material impact on the presentation of the consolidated financial statements.

Equity Investments. Investments in affiliates in which the Company's ownership is 20% to 50% are accounted for by the equity method. Equity income is reported in "Other income and (expense), net" in the Consolidated Statements of Operations. Equity income during the years ended December 31, 2018, 2017, and 2016 totaled zero, \$0.1 million, and \$0.2 million, respectively.

Revenue Recognition. Revenue is recognized in accordance with FASB ASC 606, "Revenue from Contracts with Customers" ("ASC 606"). Revenue is recognized based on the consideration expected to be received for delivery of as-is or processed metal products when, or as, the Company satisfies its contractual obligation to transfer control of a product to a customer, which we refer to as a performance obligation. See Note 16: Revenue Recognition for further details.

Provision for allowances, claims, and doubtful accounts. We perform ongoing credit evaluations of customers and set credit limits based upon review of the customers' current credit information and payment history. The Company monitors customer payments and maintains a provision for estimated credit losses based on historical experience and specific customer collection issues that the Company has identified. Estimation of such losses requires adjusting historical loss experience for current economic conditions and judgments about the probable effects of economic conditions on certain customers. The Company cannot guarantee that the rate of future credit losses will be similar to past experience. Provisions for allowances and claims are based upon historical rates, expected trends, and estimates of potential returns, allowances, customer discounts, and incentives. The Company considers all available information when assessing the adequacy of the provision for allowances, claims, and doubtful accounts.

Shipping and Handling Fees and Costs. Shipping and handling fees billed to customers are classified in "Net Sales" in our Consolidated Statement of Operations. Shipping and handling costs, primarily distribution costs, are classified in "Warehousing, delivery, selling, general, and administrative" expenses in our Consolidated Statement of Operations. These costs totaled \$112.3 million, \$84.8 million, and \$76.4 million for the years ended December 31, 2018, 2017, and 2016, respectively. In accordance with ASC 606, the Company has elected to treat shipping and handling costs as an activity necessary to fulfill the performance obligation

to transfer product to the customer and not as a separate performance obligation. Shipping and handling costs are estimated at quarter end in proportion to revenue recognized for transactions where actual costs are not yet known.

Benefits for Retired Employees. The Company recognizes the funded status of its defined benefit pension and other postretirement plans in the Consolidated Balance Sheets, with changes in the funded status recognized through accumulated other comprehensive income (loss), net of tax, in the year in which the changes occur. The estimated cost of the Company's defined benefit pension plan and its postretirement medical benefits are determined annually after considering information provided by consulting actuaries. Key factors used in developing estimates of these liabilities include assumptions related to discount rates, rates of return on investments, future compensation costs, healthcare cost trends, benefit payment patterns, and other factors. The cost of these benefits for retirees is accrued during their term of employment. Pensions are funded primarily in accordance with the requirements of the Employee Retirement Income Security Act ("ERISA") of 1974 and the Pension Protection Act of 2006 into a trust established for the Ryerson Pension Plan. Costs for retired employee medical benefits are funded when claims are submitted. Certain employees are covered by a defined contribution plan, for which the cost is expensed in the period earned.

Cash Equivalents. Cash equivalents reflected in the financial statements are highly liquid, short-term investments with original maturities of three months or less. Checks issued in excess of funds on deposit at the bank represent "book" overdrafts. We reclassified \$57.5 million and \$51.2 million to accounts payable at December 31, 2018 and 2017, respectively.

Inventory Valuation. Inventories are stated at the lower of cost or market value. We primarily use the last-in, first-out ("LIFO") method for valuing our domestic inventories. We use the moving average cost and the specific cost methods for valuing our foreign inventories.

Property, Plant, and Equipment. Property, plant, and equipment, including land use rights and capital lease assets, are depreciated for financial reporting purposes using the straight-line method over the estimated useful lives of the assets. The provision for depreciation in all periods presented is based on the following estimated useful lives of the assets:

Land improvements	20 years
Buildings	45 years
Machinery and equipment	10-15 years
Furniture and fixtures	10 years
Transportation equipment	3-6 years
Land use rights	50 years

Expenditures for normal repairs and maintenance are charged against income in the period incurred.

Goodwill. In accordance with FASB ASC 350, "Intangibles – Goodwill and Other" ("ASC 350"), goodwill is reviewed at least annually for impairment or whenever indicators of potential impairment exist. We test for impairment of goodwill by assessing various qualitative factors with respect to developments in our business and the overall economy and calculating the fair value of a reporting unit using the discounted cash flow method, as necessary. If we determine that it is more likely than not that the fair value of a reporting unit is less than the carrying value based on our qualitative assessment, we will proceed to the quantitative goodwill impairment test, in which we compare the fair value of the reporting unit where the goodwill resides to its carrying value. If the carrying amount of goodwill exceeds its implied fair value, an impairment loss is recognized in an amount equal to that excess, not to exceed the carrying amount of the goodwill. The fair value of the reporting unit is estimated using a combination of an income approach and a market approach as this combination is deemed to be the most indicative of fair value in an orderly transaction between market participants.

Long-lived Assets and Other Intangible Assets. Long-lived assets held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The Company estimates the future cash flows expected to result from the use of the asset and its eventual disposition. If the sum of the expected future cash flows (undiscounted and without interest charges) is less than the carrying amount of the asset, an impairment is recognized. Any related impairment loss is calculated based upon comparison of the fair value to the carrying value of the asset. Separate intangible assets that have finite useful lives are amortized over their useful lives. An impaired intangible asset would be written down to fair value, using the discounted cash flow method.

Deferred Financing Costs. Deferred financing costs associated with the issuance of debt are being amortized using the effective interest method over the life of the debt. Deferred financing costs related to a recognized debt liability are presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability.

Income Taxes. Deferred tax assets or liabilities reflect temporary differences between amounts of assets and liabilities for financial and tax reporting. Such amounts are adjusted, as appropriate, to reflect changes in enacted tax rates expected to be in effect when the temporary differences reverse. A valuation allowance is established to offset any deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. The determination of the amount of a valuation allowance to be provided on recorded deferred tax assets involves estimates regarding (1) the timing and amount of the reversal of taxable temporary differences, (2) expected future taxable income, (3) the impact of tax planning strategies, and (4) the ability to carry back tax losses to offset prior taxable income. In assessing the need for a valuation allowance, the Company considers all available positive and negative evidence, including past operating results, projections of future taxable income, and the feasibility of ongoing tax planning strategies. The projections of future taxable income include a number of estimates and assumptions regarding volume, pricing, costs, and industry cyclicality.

Significant judgment is required in determining income tax provisions and in evaluating tax positions. In the normal course of business, the Company and its subsidiaries are examined by various federal, state, and foreign tax authorities. The Company records the impact of a tax position, if that position is more likely than not to be sustained in audit, based on the technical merits of the position. The Company regularly assesses the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. The Company continually assesses the likelihood and amount of potential adjustments and adjusts the income tax provision, the current tax liability, and deferred taxes in the period in which the facts that give rise to a revision become known.

The Company recognizes the benefit of tax positions when a benefit is more likely than not (i.e., greater than 50% likely) to be sustained on its technical merits. Recognized tax benefits are measured at the largest amount that is more likely than not to be sustained, based on cumulative probability, in final settlement of the position. The Company recognizes interest and penalties related to unrecognized tax benefits as a component of income tax expense.

Earnings Per Share Data. Basic earnings per share ("EPS") is computed by dividing net earnings available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted earnings per share is computed by giving effect to all dilutive potential common shares that were outstanding during the period, unless inclusion of the potential common shares would have an antidilutive effect. Basic earnings per share excludes the dilutive effect of common stock equivalents such as stock options and warrants, while diluted earnings per share, assuming dilution, includes such dilutive effects.

Foreign Currency. The Company translates assets and liabilities of its foreign subsidiaries, where the functional currency is the local currency, into U.S. dollars at the current rate of exchange on the last day of the reporting period. Revenues and expenses are translated at the average monthly exchange rates prevailing during the year.

For foreign currency transactions, the Company translates these amounts to the Company's functional currency at the exchange rate effective on the invoice date. If the exchange rate changes between the time of purchase and the time actual payment is made, a foreign exchange transaction gain or loss results which is included in determining net income (loss) for the year. The Company recognized \$3.0 million of exchange gains for the year ended December 31, 2018, and \$2.8 million and \$4.0 million of exchange losses for the years ended December 31, 2017 and 2016, respectively. These amounts are primarily classified in "Other income and (expense), net" in our Consolidated Statements of Operations.

Recent Accounting Pronouncements

Impact of Recently Issued Accounting Standards-Adopted

In May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers," which created ASC 606 "Revenue from Contracts with Customers" ("ASC 606") and supersedes the revenue recognition requirements in ASC 605 "Revenue Recognition" ("ASC 605"). The guidance in ASU 2014-09 and subsequently issued amendments outlines a comprehensive model for all entities to use in accounting for revenue arising from contracts with customers as well as required disclosures. Under the new standard, recognition of revenue occurs when a customer obtains control of promised goods or services in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. The new standard requires additional disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers including significant judgments and changes in judgments. We adopted the new standard effective January 1, 2018 using the modified retrospective transition method with the cumulative effect recorded to the opening balance of retained earnings as of the date of adoption. See Note 16: Revenue Recognition for further details.

In January 2016, the FASB issued ASU 2016-01, "Financial Instruments – Overall: Recognition and Measurement of Financial Assets and Financial Liabilities," and in February 2018, the FASB issued ASU 2018-03, "Technical corrections and improvements to

Financial Instruments – Overall (Subtopic 825-10) – Recognition and Measurement of Financial Assets and Financial Liabilities." The amendments in ASU 2016-01 change the accounting for non-consolidated equity investments that are not accounted for under the equity method of accounting by requiring changes in fair value to be recognized in net income. Under prior guidance, changes in fair value for investments of this nature were recognized in accumulated other comprehensive income as a component of stockholders' equity. Additionally, ASU 2016-01 simplifies the impairment assessment of equity investments without readily determinable fair values; requires entities to use the exit price when estimating the fair value of financial instruments; and modifies various presentation disclosure requirements for financial instruments. The amendments should be applied by means of a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. The amendments related to equity securities without readily determinable fair values (including disclosure requirements) should be applied prospectively to equity investments that exist as of the date of adoption. The update is effective for interim and annual reporting periods beginning after December 15, 2017. We adopted this guidance for our fiscal year beginning January 1, 2018. The adoption of this guidance resulted in a reclassification of \$1.0 million from accumulated other comprehensive income to retained earnings.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows – Classification of Certain Cash Receipts and Certain Cash Payments." The amendments address the diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The update is effective for interim and annual reporting periods beginning after December 15, 2017. The amendments should be applied using a retrospective transition method to each period presented. If it is impracticable to apply the amendments retrospectively for some of the issues, the amendments for those issues would be applied prospectively as of the earliest date practicable. We adopted this guidance for our fiscal year beginning January 1, 2018. We have made an accounting policy election to classify distributions received from equity method investees using the cumulative earnings approach. The adoption of this guidance resulted in reclassifications for distributions received from equity method investees and payments of contingent consideration related to acquisitions within the Consolidated Statements of Cash Flows for the years ended December 31, 2017 and 2016, but the overall impact was not material.

In October 2016, the FASB issued ASU 2016-16, "Income Taxes – Intra-Entity Transfers of Assets Other Than Inventory." The amendment requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The update is effective for interim and annual reporting periods beginning after December 15, 2017. The amendments should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. We adopted this guidance for our fiscal year beginning January 1, 2018. The adoption of this guidance did not have an impact on our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18 "Statement of Cash Flows – Restricted Cash." The amendment requires entities to include in their cash and cash-equivalent balances in the statement of cash flows those amounts that are deemed to be restricted cash and restricted cash equivalents. The ASU does not define the terms "restricted cash" and "restricted cash equivalents." The amendment is effective for interim and annual reporting periods beginning after December 15, 2017. We adopted this guidance for our fiscal year beginning January 1, 2018 using a retrospective transition method to each period presented. The adoption of this guidance did not have a material impact on our consolidated financial statements. The previous disclosure for restricted cash within investing activities was removed and the beginning and ending balances of restricted cash are now included in the cash and cash-equivalents balances in our Consolidated Statements of Cash Flows. There was no impact on the cash flows from operations. See Note 3: Cash, Cash Equivalents, and Restricted Cash for additional required disclosures.

In March 2017, the FASB issued ASU 2017-07, "Compensation – Retirement Benefits: Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post Retirement Benefit Cost." The amendment requires entities to disaggregate the service cost component from the other components of net benefit cost and limits the capitalization of net benefit cost to only the service cost component. The amendment also provides explicit guidance on how to present the service cost component and the other components of net benefit cost in the statement of comprehensive income. The amendments are effective for interim and annual reporting periods beginning after December 15, 2017. The disclosure requirements of the amendments should be applied retrospectively and the requirements concerning capitalization of the net service costs should be applied prospectively. We adopted this guidance for our fiscal year beginning January 1, 2018. The adoption of this guidance resulted in an \$8.9 million and \$11.1 million reclassification between warehousing, delivery, selling, general, and administrative and other income and (expense), net within the Consolidated Statements of Operations for the years ended December 31, 2017 and 2016, respectively, with no impact on gross margins, and overall did not have a material impact on our consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, "Compensation – Stock Compensation: Scope of Modification Accounting." The amendment provides guidance about which changes to the terms and conditions of a share-based payment award require an entity to apply the accounting guidance on modifications to share-based payment awards. The guidance is effective for interim and annual reporting periods beginning after December 15, 2017. We adopted this guidance for our fiscal year beginning January 1, 2018. The adoption of this guidance did not have an impact on our consolidated financial statements.

In October 2018, the FASB issued ASU 2018-16, "Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes." The amendment permits the use of the OIS rate based on SOFR as a U.S. benchmark interest rate for hedge accounting purposes under Topic 815. The update is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted in any interim period upon issuance of this update if an entity already has adopted ASU 2017-12. We early adopted this guidance as of December 31, 2018. The adoption of this guidance did not have an impact on our consolidated financial statements.

Impact of Recently Issued Accounting Standards-Not Yet Adopted

In February 2016, the FASB issued ASU 2016-02, "Leases" codified in ASC 842, "Leases". The guidance in ASU 2016-02 and subsequently issued amendments requires lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by all leases. The amendment also requires disclosures designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. The update is effective for interim and annual reporting periods beginning after December 15, 2018. We will adopt the standard effective January 1, 2019 using the alternative modified retrospective transition method, which allows for application of the guidance at the beginning of the period in which it is adopted, rather than at the beginning of the earliest comparative period presented.

The Company has established a cross-functional project team to implement the new lease guidance. We have evaluated existing contracts to identify embedded leases, implemented a lease software to be used for lease tracking and reporting, and developed internal controls around the collection, reporting, and reconciliation of lease data.

The Company is finalizing the quantification of the effects on our consolidated financial statements. We have made an accounting policy election to keep leases with an initial term of 12 months or less off the balance sheet and recognize the related lease payments in the Consolidated Statements of Operations on a straight-line basis over the lease term. We have elected to use the package of practical expedients as well as the practical expedient not to separate lease and non-lease components for all asset classes. The adoption of the standard is expected to result in the recognition of an operating right-of-use asset of approximately \$81 million, an operating lease liability of approximately \$85 million, and an adjustment to the opening balance of retained earnings of approximately \$3 million, as of January 1, 2019. We do not believe the standard will materially affect our consolidated net earnings or have a notable impact on our liquidity. The standard will have no impact on our debt-covenant compliance under our current agreements.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments." The guidance in ASU 2016-13 and subsequently issued amendments requires financial assets measured at amortized cost basis to be presented at the net amount expected to be collected, thus eliminating the probable initial recognition threshold and instead reflecting the current estimate of all expected credit losses. The guidance also requires that credit losses relating to available-for-sale debt securities be recorded through an allowance for credit losses rather than a write-down, thus enabling the ability to record reversals of credit losses in current period net income. The update is effective for interim and annual reporting periods beginning after December 15, 2019. An entity will apply the amendment through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective (that is, a modified-retrospective approach). A prospective transition approach is required for debt securities for which an-other-than-temporary impairment had been recognized before the effective date. The effect of the prospective transition approach is to maintain the same amortized cost basis before and after the effective date of this update. Early adoption is permitted only for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. We will adopt this guidance for our fiscal year beginning January 1, 2020. We are still assessing the impact of adoption on our consolidated financial statements.

In February 2018, the FASB issued ASU 2018-02, "Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." The guidance allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the U.S. Tax Cuts and Jobs Act ("U.S. Tax Act"). It also requires certain disclosures about stranded tax effects. However, the underlying guidance that requires that the effect of a change in tax laws or rates be included in income from continuing operations is not affected. The guidance is effective for interim and annual reporting periods beginning after December 15, 2018 and should be applied either in the period of adoption or retrospectively to each period (or periods) in which the effect of the change in the U.S. federal corporate income tax rate in the U.S. Tax Act is recognized. Early adoption is permitted. We will adopt this guidance for our fiscal year beginning January 1, 2019. The adoption of this guidance is not expected to have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, "Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement." The guidance amends the fair value measurement disclosures by modifying the disclosure requirements in Topic 820, Fair Value Measurement. The update is effective for interim and annual reporting periods beginning after December 15,

2019. The guidance allows for early adoption to remove or modify disclosures upon issuance of this amendment, and for delayed adoption of the additional disclosures until their effective date. We are still assessing the impact of adoption on our current fair value measurement disclosures.

In August 2018, the FASB issued ASU 2018-14, "Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans." The amendment removes certain employee benefit plan disclosures that no longer are considered cost-beneficial, clarifies the specific requirements of certain disclosures, and adds certain disclosure requirements identified as relevant. The update is effective for annual reporting periods beginning after December 15, 2020 and should be applied on a retrospective basis to all periods presented. Early adoption is permitted. We are still assessing the impact of adoption on our current employee benefit plans disclosures.

In August 2018, the FASB issued ASU 2018-15, "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract." The guidance aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). Accordingly, the guidance requires an entity (customer) in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. The guidance is effective for interim and annual reporting periods beginning after December 15, 2019 and should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. Early adoption is permitted. We are still assessing the impact of adoption on our consolidated financial statements.

Note 2: Acquisitions

On July 2, 2018 ("the acquisition date") JT Ryerson purchased Central Steel and Wire Company ("CS&W"). CS&W is a leading metal service center with locations across the Central and Eastern United States offering a wide selection of products and capabilities, with a commercial portfolio centered on bar, tube, plate, and steel products. We believe that the acquisition of CS&W will expand our long, tube, and plate portfolio. Our combined commercial, operational, and processing strengths will provide a broader and deeper array of products to our customers in the Midwest and Northeast United States. The fair value of the consideration totaled \$163.5 million on the acquisition date.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the acquisition date.

	A	t July 2,
		2018
	(In	millions)
Cash and cash equivalents	\$	10.0
Receivables, less provision for allowance, claims, and doubtful accounts		80.0
Inventories		179.8
Prepaid expenses and other current assets		1.7
Property, plant, and equipment		66.5
Other intangible assets		16.1
Total identifiable assets acquired		354.1
Accounts payable		(49.7)
Salaries, wages, and commissions		(4.9)
Other accrued liabilities		(6.5)
Deferred income taxes		(27.7)
Deferred employee benefits		(31.8)
Total liabilities assumed		(120.6)
Net identifiable assets acquired		233.5
Bargain purchase gain		(70.0)
Total purchase price	\$	163.5

The Company used third-party valuation firms to estimate the fair values of property, plant, and equipment and intangible assets as well as to remeasure the deferred employee benefits liabilities. Inventory was valued by the Company using acquisition date fair values of the metals.

The fair value of accounts receivables acquired is \$80.0 million, with a gross amount of \$81.8 million. The Company expects \$1.8 million to be uncollectible.

The \$16.1 million of acquired intangible assets is related to trademarks acquired with a useful life of 10 years.

The transaction resulted in a bargain purchase gain primarily due to higher inventory and property, plant, and equipment fair values compared to book values. The Company believes that the bargain purchase gain was primarily the result of the decision by majority stockholders of CS&W to sell their interests as CS&W had been experiencing increasing net losses. The agreed upon purchase price reflected the fact the seller would have needed to incur significant costs on future integration initiatives and to upgrade their infrastructure and computer systems in order to restore the CS&W to a profitable basis. With our existing nationwide service center operations, we believe that our infrastructure will allow the necessary operational improvements to be implemented more efficiently than the seller. The gain of \$70.0 million is included in Other income and (expense), net in the Consolidated Statements of Operations. The Company has recognized \$1.6 million in acquisition-related fees, which is included in Warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations.

Included in the year ended December 31, 2018 financial results is \$347.5 million of revenue and \$78.5 million (includes the \$70.0 million bargain purchase gain) of net income from CS&W since the acquisition date.

The following unaudited pro forma information presents consolidated results of operations for the year ended December 31, 2018 and 2017 as if the acquisition of CS&W on July 2, 2018 had occurred on January 1, 2017:

		Pro F	orma				
	For	For the Year Ended December 31,					
		2018		2017			
Net sales	\$	4,767.7	\$	3,961.3			
Net income (loss) attributable to Ryerson Holding Corporation		15.2		(1.3)			

The 2018 supplemental pro forma net income attributable to Ryerson Holding Corporation was adjusted to exclude the \$70.0 million CS&W bargain purchase gain realized in 2018 as it is a nonrecurring item.

On April 2, 2018, Ryerson Holding acquired Fanello Industries, LLC ("Fanello"), a privately owned metal service company located in Lavonia, Georgia. The acquisition is not material to our consolidated financial statements.

On February 15, 2017, Ryerson Holding acquired Guy Metals, Inc. ("Guy Metals"), a privately-owned metal service center company located in Hammond, Wisconsin. The acquisition is not material to our consolidated financial statements.

On January 19, 2017, Ryerson Holding acquired The Laserflex Corporation ("Laserflex"), a privately-owned metal fabricator specializing in laser fabrication metal processing and welding with locations in Columbus, Ohio and Wellford, South Carolina. The acquisition is not material to our consolidated financial statements.

Pro forma information related to the acquisitions of Fanello, Guy Metals, and Laserflex is not provided above as the impact on the Consolidated Statements of Operations is not material.

Note 3: Cash, Cash Equivalents, and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the Consolidated Balance Sheets that sum to the total of the beginning and ending cash balances shown in the Consolidated Statements of Cash Flows:

	 At December 31,				
	 2018 2017				
	(In millions)				
Cash and cash equivalents	\$ 23.2	\$	77.4		
Restricted cash	 1.1		1.1		
Total cash, cash equivalents, and restricted cash	\$ 24.3	\$	78.5		

We have cash restricted for purposes of covering letters of credit that can be presented for potential insurance claims.

Note 4: Inventories

Inventories, at stated LIFO value, were classified at December 31, 2018 and 2017 as follows:

	At Dec	ember 3	31,
	2018		2017
	(In n	nillions))
In process and finished products	\$ 806	3 \$	616.5

If current cost had been used to value inventories, such inventories would have been \$18 million higher and \$71 million lower than reported at December 31, 2018 and 2017, respectively. Approximately 91% and 89% of inventories are accounted for under the LIFO method at December 31, 2018 and 2017, respectively. Non-LIFO inventories consist primarily of inventory at our foreign facilities using the moving average cost and the specific cost methods. Substantially all of our inventories consist of finished products.

The Company has consignment inventory at certain customer locations, which totaled \$9.3 million and \$8.9 million at December 31, 2018 and 2017, respectively.

Note 5: Property, Plant, and Equipment

Property, plant, and equipment consisted of the following at December 31, 2018 and 2017:

	 At Decem	ber 31,
	 2018	2017
	(In milli	ions)
Land and land improvements	\$ 101.2	92.6
Buildings and leasehold improvements	238.1	198.8
Machinery, equipment, and other	406.7	377.9
Capital and financing leases	76.6	65.5
Construction in progress	 15.8	7.9
Total	838.4	742.7
Less: Accumulated depreciation	 (349.4)	(319.8)
Net property, plant, and equipment	\$ 489.0	\$ 422.9

The Company recorded impairment charges related to fixed assets of \$0.2 million, \$0.1 million, and \$0.4 million for the years ended December 31, 2018, 2017, and 2016, respectively. The impairment charges recorded in all periods related to certain assets held for sale in order to recognize the assets at their fair value less cost to sell, in accordance with FASB ASC 360-10-35-43, "*Property, Plant, and Equipment – Other Presentation Matters*." The Company recognized gains on the sale of assets classified as held for sale of zero, \$0.5 million, and zero for the years ended December 31, 2018, 2017, and 2016 respectively. The Company had \$7.8 million and zero of assets held for sale classified within "Prepaid expenses and other current assets" on the Consolidated Balances Sheets as of December 31, 2018 and 2017, respectively.

Note 6: Definite-Lived Intangible Assets

The following summarizes the components of definite-lived intangible assets at December 31, 2018 and 2017:

		At	December 31, 2018	8	At December 31, 2017			
	Weighted Average Amortizable Life in Years	Gross Carrying Amount	Accumulated Amortization	<u>Net</u> (In mi	Gross Carrying Amount llions)	Accumulated Amortization	Net	
Amortizable intangible assets								
Customer relationships	13.0	\$ 58.1	\$ (33.8) \$	24.3	\$ 56.9	\$ (29.7) \$	27.2	
Developed technology / product know-how	7.9	4.6	(2.5)	2.1	4.6	(2.2)	2.4	
Non-compete agreements	5.6	0.9	(0.6)	0.3	0.9	(0.4)	0.5	
Trademarks	13.7	42.3	(10.9)	31.4	25.4	(8.6)	16.8	
Licenses	7.0	0.5	(0.5)	_	0.5	(0.5)	_	
Total definite-lived intangible assets		\$ 106.4	\$ (48.3) \$	58.1	\$ 88.3	\$ (41.4) \$	46.9	

Amortization expense related to intangible assets for the years ended December 31, 2018, 2017, and 2016 was \$6.9 million, \$6.1 million, and \$5.4 million, respectively.

Estimated amortization expense related to intangible assets at December 31, 2018, for each of the years in the five year period ending December 31, 2023 and thereafter is as follows:

	Estim Amortizatio	
	(In mil	lions)
For the year ended December 31, 2019	\$	7.6
For the year ended December 31, 2020		7.3
For the year ended December 31, 2021		6.4
For the year ended December 31, 2022		6.3
For the year ended December 31, 2023		5.1
For the years ended thereafter		25.4

Note 7: Goodwill

The following is a summary of changes in the carrying amount of goodwill for the years ended December 31, 2018 and 2017:

	 Cost	Accumulated Impairment (In millions)			Carrying Amount	
Balance at January 1, 2017	\$ 111.5	\$	(8.3)	\$	103.2	
Acquisitions	12.1		_	\$	12.1	
Balance at December 31, 2017	\$ 123.6	\$	(8.3)	\$	115.3	
Acquisitions	5.0				5.0	
Balance at December 31, 2018	\$ 128.6	\$	(8.3)	\$	120.3	

In 2018, the Company recognized \$5.0 million of goodwill within the US Reporting unit related to the Fanello acquisition, which will be deductible for income tax purposes. In 2017, the Company recognized \$12.1 million of goodwill within the US reporting unit related to both the Laserflex acquisition, which will be deductible for income tax purposes, and the Guy Metals acquisition, which is not deductible for income tax purposes.

Pursuant to ASC 350, "Intangibles – Goodwill and Other," we review the recoverability of goodwill annually as of October 1 or whenever significant events or changes occur which might impair the recovery of recorded amounts. Based on our October 1, annual goodwill impairment test, we determined there was no goodwill impairment in 2018.

Note 8: Restructuring and Other Charges

The following summarizes restructuring accrual activity for the years ended December 31, 2018, 2017, and 2016:

	Employee Related Costs		_	Tenancy and Other Costs	 Total Restructuring Costs
				(In millions)	
Balance at January 1, 2016	\$	1.2	\$	0.5	\$ 1.7
Restructuring charges		_		1.0	1.0
Cash payments		(0.7)		(0.5)	(1.2)
Reclassification		_		0.2	0.2
(Reduction)/addition to reserve		(0.3)	_	0.1	 (0.2)
Balance at Year Ended December 31, 2016	\$	0.2	\$	1.3	\$ 1.5
Restructuring charges		_		0.8	0.8
Cash payments		_		(0.5)	(0.5)
Reclassification		_		0.1	0.1
Reduction to reserve		(0.2)	_	<u> </u>	 (0.2)
Balance at December 31, 2017	\$	_	\$	1.7	\$ 1.7
Restructuring charges		3.6		0.6	4.2
Cash payments		(3.2)		(0.8)	(4.0)
Balance at December 31, 2018	\$	0.4	\$	1.5	\$ 1.9

2018

In 2018, the Company recorded a \$3.6 million charge for employee-related costs primarily for severance costs for corporate staff reductions and two facility closures. The Company paid \$3.2 million of the employee costs related to these actions. The remaining \$0.4 million of employee-related costs are expected to be paid in 2019.

During 2018, the Company also recorded a \$0.6 million charge to increase the reserve for tenancy-related costs for a facility closed in 2013. The Company paid \$0.8 million in costs related to this facility closure. The remaining \$1.5 million of tenancy-related costs are expected to be paid through 2025.

2017

In 2017, the Company recorded an \$0.8 million charge in warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations to increase the reserve for tenancy-related costs for a facility closed in 2013. The Company paid \$0.4 million in costs related to this facility closure and also reclassified an existing \$0.1 million liability for future lease payments to the restructuring reserve. In addition, the Company paid \$0.1 million in costs related to a facility closed in 2016.

During 2017, the Company recorded a \$0.2 million reduction to the reserve for employee-related costs and credited warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations. This action fully utilized the remaining reserve for employee-related costs.

2016

In 2016, the Company recorded a charge of \$1.0 million related to a facility closure, which consists of tenancy-related costs, primarily future lease payments. The Company paid \$0.2 million in costs related to this facility closure and reclassified an existing \$0.2 million liability for future lease payments at this facility to the restructuring reserve. The Company also paid \$0.3 million in costs related to a facility closed in 2013 and recorded an addition of \$0.1 million to the reserve for tenancy-related costs, which was charged to warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations.

During 2016, the Company paid \$0.7 million in employee-related costs related to restructuring actions taken in the fourth quarter of 2015. The Company also recorded a \$0.3 million reduction to the reserve for employee-related costs and credited warehousing, delivery, selling, general, and administrative expense in the Consolidated Statements of Operations.

Note 9: Debt

Long-term debt consisted of the following at December 31, 2018 and 2017:

	 At December 31,				
	 2018	2017			
	(In millions)			
Ryerson Credit Facility	\$ 535.9 \$	384.2			
11 % Senior Secured Notes due 2022	599.5	650.0			
Foreign debt	19.5	21.3			
Other debt	8.3	3.9			
Unamortized debt issuance costs and discounts	(9.9)	(13.7)			
Total debt	 1,153.3	1,045.7			
Less:					
Short-term foreign debt	19.5	21.3			
Other short-term debt	 7.8	<u> </u>			
Total long-term debt	\$ 1,126.0 \$	1,024.4			

The principal payments required to be made on debt during the next five fiscal years are shown below:

	 Amount
	(In millions)
For the year ended December 31, 2019	\$ 27.3
For the year ended December 31, 2020	0.1
For the year ended December 31, 2021	536.0
For the year ended December 31, 2022	599.7
For the year ended December 31, 2023	0.1
For the years ended thereafter	_

Ryerson Credit Facility

On November 16, 2016, Ryerson entered into an amendment with respect to its \$1.0 billion revolving credit facility (as amended, the "Old Credit Facility"), to reduce the total facility size from \$1.0 billion to \$750 million, reduce the interest rate on outstanding borrowings by 25 basis points, reduce commitment fees on amounts not borrowed by 2.5 basis points, and to extend the maturity date to November 16, 2021. On June 28, 2018, Ryerson entered into a second amendment with respect to the Old Credit Facility to increase the facility size from \$750 million to \$1.0 billion (the Old Credit Facility as amended, the "Ryerson Credit Facility").

At December 31, 2018, Ryerson had \$535.9 million of outstanding borrowings, \$12 million of letters of credit issued, and \$392 million available under the Ryerson Credit Facility compared to \$384.2 million of outstanding borrowings, \$12 million of letters of credit issued, and \$264 million available at December 31, 2017. Total credit availability is limited by the amount of eligible accounts receivable, inventory, and qualified cash pledged as collateral under the agreement insofar as Ryerson is subject to a borrowing base comprised of the aggregate of these three amounts, less applicable reserves. Eligible accounts receivable, at any date of determination, is comprised of the aggregate value of all accounts directly created by a borrower (and in the case of Canadian accounts, the Canadian borrower) in the ordinary course of business arising out of the sale of goods or the rendering of services, each of which has been invoiced, with such receivables adjusted to exclude various ineligible accounts, including, among other things, those to which a borrower (or guarantor, as applicable) does not have sole and absolute title and accounts arising out of a sale to an employee, officer, director, or affiliate of a borrower (or guarantor, as applicable). Eligible inventory, at any date of determination, is comprised of the net orderly liquidation value of all inventory owned by a borrower (and in the case of Canadian accounts, the Canadian borrower). Qualified cash consists of cash in an eligible deposit account that is subject to customary restrictions and liens in favor of the lenders.

The Ryerson Credit Facility has an allocation of \$940 million to the Company's subsidiaries in the United States and an allocation of \$60 million to Ryerson Holding's Canadian subsidiary that is a borrower. Amounts outstanding under the Ryerson Credit Facility bear interest at (i) a rate determined by reference to (A) the base rate (the highest of the Federal Funds Rate plus 0.50%, Bank of America, N.A.'s prime rate, and the one-month LIBOR rate plus 1.00%), or (B) a LIBOR rate or, (ii) for Ryerson Holding's Canadian subsidiary that is a borrower, (A) a rate determined by reference to the Canadian base rate (the greatest of the Federal Funds Rate plus 0.50%, Bank of America-Canada Branch's "base rate" for commercial loans in U.S. Dollars made at its "base rate", and the

30 day LIBOR rate plus 1.00%), (B) the prime rate (the greater of Bank of America-Canada Branch's "prime rate" for commercial loans made by it in Canada in Canadian Dollars and the one-month Canadian bankers' acceptance rate plus 1.00%), or (C) the bankers' acceptance rate. The spread over the base rate and prime rate is between 0.25% and 0.50% and the spread over the LIBOR for the bankers' acceptances is between 1.25% and 1.50%, depending on the amount available to be borrowed under the Ryerson Credit Facility. Overdue amounts and all amounts owed during the existence of a default bear interest at 2% above the rate otherwise applicable thereto. Ryerson also pays commitment fees on amounts not borrowed at a rate of 0.23%.

We attempt to minimize interest rate risk exposure through the utilization of interest rate swaps, which are derivative financial instruments. In March 2017, we entered into an interest rate swap to fix interest on \$150 million of our floating rate debt under the Ryerson Credit Facility at a rate of 1.658% through March 2020. The swap has reset dates and critical terms that match our existing debt and the anticipated critical terms of future debt. The weighted average interest rate on the outstanding borrowings under the Ryerson Credit Facility including the interest rate swap was 3.5 percent and 2.8 percent at December 31, 2018 and 2017, respectively.

Borrowings under the Ryerson Credit Facility are secured by first-priority liens on all of the inventory, accounts receivables, lockbox accounts, and related assets of the borrowers and the guarantors.

The Ryerson Credit Facility also contains covenants that, among other things, restrict Ryerson Holding and its restricted subsidiaries with respect to the incurrence of debt, the creation of liens, transactions with affiliates, mergers and consolidations, sales of assets, and acquisitions. The Ryerson Credit Facility also requires that, if availability under the Ryerson Credit Facility declines to a certain level, Ryerson maintain a minimum fixed charge coverage ratio as of the end of each fiscal quarter, and includes defaults upon (among other things) the occurrence of a change of control of Ryerson and a cross-default to other financing arrangements.

The Ryerson Credit Facility contains events of default with respect to, among other things, default in the payment of principal when due or the payment of interest, fees, and other amounts due thereunder after a specified grace period, material misrepresentations, failure to perform certain specified covenants, certain bankruptcy events, the invalidity of certain security agreements or guarantees, material judgments, and the occurrence of a change of control of Ryerson. If such an event of default occurs, the lenders under the Ryerson Credit Facility will be entitled to various remedies, including acceleration of amounts outstanding under the Ryerson Credit Facility and all other actions permitted to be taken by secured creditors.

The lenders under the Ryerson Credit Facility could reject a borrowing request if any event, circumstance, or development has occurred that has had or could reasonably be expected to have a material adverse effect on the Company. If Ryerson Holding, JT Ryerson, any of the other borrowers, or any restricted subsidiaries of JT Ryerson becomes insolvent or commences bankruptcy proceedings, all amounts borrowed under the Ryerson Credit Facility will become immediately due and payable.

Net proceeds of short-term borrowings that are reflected in the Consolidated Statements of Cash Flows represent borrowings under the Ryerson Credit Facility with original maturities less than three months.

2022 Notes

On May 24, 2016, JT Ryerson issued \$650 million in aggregate principal amount of the 2022 Notes (the "2022 Notes"). The 2022 Notes bear interest at a rate of 11.00% per annum. The 2022 Notes are fully and unconditionally guaranteed on a senior secured basis by all of our existing and future domestic subsidiaries that are co-borrowers or that have guarantee obligations under the Ryerson Credit Facility.

The 2022 Notes and the related guarantees are secured by a first-priority security interest in substantially all of JT Ryerson's and each guarantor's present and future assets located in the United States (other than receivables, inventory, cash, deposit accounts and related general intangibles, certain other assets and proceeds thereof), subject to certain exceptions and customary permitted liens. The 2022 Notes and the related guarantees are also secured on a second-priority basis by a lien on the assets that secure JT Ryerson's and the Company's obligations under the Ryerson Credit Facility.

The 2022 Notes will be redeemable, in whole or in part, at any time on or after May 15, 2019 at certain redemption prices. The redemption price for the 2022 Notes if redeemed during the twelve months beginning (i) May 15, 2019 is 105.50%, (ii) May 15, 2020 is 102.75%, and (iii) May 15, 2021 and thereafter is 100.00%. JT Ryerson may redeem some or all of the 2022 Notes before May 15, 2019 at a redemption price of 100.00% of the principal amount, plus accrued and unpaid interest, if any, to the redemption date, plus a "make-whole" premium. In addition, JT Ryerson may redeem up to 35% of the 2022 Notes before May 15, 2019 with respect to the 2022 Notes with the net cash proceeds from certain equity offerings at a price equal to 111.00%, with respect to the 2022 Notes, of the principal amount thereof, plus any accrued and unpaid interest, if any. JT Ryerson may be required to make an offer to purchase the 2022 Notes upon the sale of assets or upon a change of control.

The 2022 Notes contain customary covenants that, among other things, limit, subject to certain exceptions, our ability, and the ability of our restricted subsidiaries, to incur additional indebtedness, pay dividends on our capital stock or repurchase our capital stock, make investments, sell assets, engage in acquisitions, mergers or consolidations, or create liens or use assets as security in other transactions. Subject to certain exceptions, JT Ryerson may only pay dividends to Ryerson Holding to the extent of 50% of cumulative net income since the issuance of the 2022 Notes, once prior losses are offset. As a result of these restrictions, the restricted net assets of consolidated subsidiaries exceed 25 percent of consolidated net assets as of December 31, 2018. Restricted net assets as of December 31, 2018 were \$219.2 million.

During 2018, a principal amount of \$50.5 million of the 2022 Notes were repurchased for \$52.2 million and retired, resulting in the recognition of a \$1.7 million loss within other income and (expense), net on the Consolidated Statement of Operations.

The net proceeds from the issuance of the 2022 Notes, along with borrowings under the Ryerson Credit Facility, were used to (i) repurchase and/or redeem in full the \$569.9 million balance of JT Ryerson's 9.00% Senior Secured Notes due 2017 (the "2017 Notes"), plus accrued and unpaid interest thereon up to, but not including, the repayment date, (ii) repurchase \$95.0 million of JT Ryerson's 11.25% Senior Secured Notes due 2018 (the "2018 Notes"), and (iii) pay related fees, expenses, and premiums.

The Company applied the provisions of ASC 470-50, "Modifications and Extinguishments" in accounting for the issuance of the 2022 Notes, redemption of the 2017 Notes, and partial repurchase of the 2018 Notes. The evaluation of the accounting under ASC 470-50 was performed on a creditor by creditor basis in order to determine if the terms of the debt were substantially different and, as a result, whether to apply modification or extinguishment accounting. For the lenders where it was determined that the terms of the debt were not substantially different, modification accounting was applied. For the remaining lenders, extinguishment accounting was applied. In connection with this debt modification and extinguishment, the Company recorded a \$16.1 million loss within other income and (expense), net on the Consolidated Statement of Operations during 2016, primarily attributed to the costs incurred with third parties for arrangement fees, legal, and other services related to the modified debt, as well as redemption fees paid to the creditors, and unamortized debt issuance costs written off related to the extinguished debt. Additionally, the costs incurred with third parties for arrangement fees, legal, and other services related to the creditors related to the modified debt were capitalized and are being amortized over the life of the modified debt using the effective interest method.

During 2016, a principal amount of \$75.4 million of the 2018 Notes were repurchased for \$68.0 million and retired, resulting in the recognition of a \$7.4 million gain within other income and (expense), net on the Consolidated Statement of Operations. Including the \$16.1 million loss on the redemption of the \$569.9 million balance of the 2017 Notes and repurchase of \$95.0 million of the 2018 Notes, the Company recognized a total net loss of \$8.7 million within other income and (expense), net on the Consolidated Statement of Operations during year 2016.

Foreign Debt

At December 31, 2018, Ryerson China's total foreign borrowings were \$19.5 million, which were owed to banks in Asia at a weighted average interest rate of 4.3% per annum and secured by inventory and property, plant, and equipment. At December 31, 2017, Ryerson China's total foreign borrowings were \$21.3 million, which were owed to banks in Asia at a weighted average interest rate of 3.7% per annum and secured by inventory and property, plant, and equipment.

Availability under Ryerson China's credit facility was \$26 million and \$25 million at December 31, 2018 and 2017, respectively. Letters of credit issued by our foreign subsidiaries totaled \$3 million at December 31, 2018 and 2017.

Note 10: Employee Benefits

The Company accounts for its pension and postretirement plans in accordance with FASB ASC 715, "Compensation – Retirement Benefits" ("ASC 715"). In addition to requirements for an employer to recognize in its Consolidated Balance Sheet an asset for a plan's overfunded status or a liability for a plan's underfunded status and to recognize changes in the funded status of a defined benefit postretirement plan in the year in which the changes occur, ASC 715 requires an employer to measure a plan's assets and its obligations that determine its funded status as of the end of the employer's fiscal year.

Prior to January 1, 1998, the Company's non-contributory defined benefit pension plan ("Ryerson Pension Plan" or "RPP") covered certain employees, retirees, and their beneficiaries. Benefits provided to participants of the plan were based on pay and years of service for salaried employees and years of service and a fixed rate or a rate determined by job grade for all wage employees, including employees under collective bargaining agreements.

Effective January 1, 1998, the Company froze the benefits accrued under its defined benefit pension plan for certain salaried employees and instituted a defined contribution plan. Effective March 31, 2000, benefits for certain salaried employees of J. M. Tull

Metals Company and AFCO Metals, subsidiaries that were merged into JT Ryerson, were similarly frozen, with the employees becoming participants in the Company's defined contribution plan. Employees who vested in their benefits accrued under the defined benefit plan at December 31, 1997 and March 31, 2000, are entitled to those benefits upon retirement. For the years ended December 31, 2018, 2017, and 2016, expense recognized for its defined contribution plans was \$8.0 million, \$7.2 million, and \$6.9 million, respectively.

CS&W also has a non-contributory defined benefit pension plan ("Central Steel and Wire Retirement Plan" or "CSWPP"), which covers certain employees, retirees, and their beneficiaries. CSWPP paid \$5.8 million in lump sums from July 2, 2018 through December 31, 2018. Because the payout was more than the service cost plus interest cost for the period, settlement accounting was reflected at year-end. There was an unrecognized loss as of December 31, 2018, of which \$0.2 million was recognized in other income and (expense), net within the Consolidated Statements of Operations.

Effective May 19, 2017, the Company froze the benefits accrued under a portion of the Ryerson Pension Plan for certain wage employees. The freeze impacted a significant number of the remaining active accruing participants, therefore, curtailment accounting was required, and the pension plan was remeasured as of May 31, 2017. The remeasurement resulted in a curtailment loss of \$0.1 million, which was recorded in warehousing, delivery, selling, general, and administrative expense within the Consolidated Statements of Operations.

The Company's U.S. other postretirement benefit plans include the Ryerson Postretirement Welfare Plans ("Ryerson OPEB") and Central Steel and Wire Postretirement Medical Plan ("CSW OPEB").

The Company has other deferred employee benefit plans, including supplemental pension plans, the liability for which totaled \$15.1 million and \$17.3 million at December 31, 2018 and 2017, respectively.

Summary of Assumptions and Activity

The tables included below provide reconciliations of benefit obligations and fair value of plan assets of the Company plans as well as the funded status and components of net periodic benefit costs for each period related to each plan. The Company uses a December 31 measurement date to determine the pension and other postretirement benefit information. The Company had an additional measurement date of May 31, 2017 due to the plan freeze discussed above. The expected rate of return on plan assets is determined based on the market-related value of the assets, recognizing any gains or losses over a four year period. The method we have chosen for amortizing actuarial gains and losses is to recognize amounts in excess of a 10% corridor (10% of the greater of the projected benefit obligation or plan assets) which are amortized over the average expected remaining lifetime of the participants in the pension plan and over the average expected remaining service period for the other postretirement benefits.

The assumptions used to determine benefit obligations at the end of the periods and net periodic benefit costs for the Pension Benefits for U.S. plans were as follows:

	July 2 to December 31, 2018 (CSWPP)	Year Ended December 31, 2018 (RPP)	June 1 to December 31, 2017	January 1 to May 31, 2017	Year Ended December 31, 2016
Discount rate for calculating obligations	4.59%	4.32%	3.64%	3.86%	4.14%
Discount rate for calculating service cost	4.49	3.84	4.20	4.51	4.80
Discount rate for calculating interest cost	4.22	3.24	3.18	3.44	3.55
Expected rate of return on plan assets	4.70	6.70	6.95	6.75	7.10
Rate of compensation increase – benefit obligations	3.00	3.00	2.90	2.70	2.70
Rate of compensation increase – net periodic benefit cost	3.00	2.90	2.70	2.70	2.80

The expected rate of return on plan assets is 6.35% for RPP and 4.00% for CSWPP for 2019.

The assumptions used to determine benefit obligations at the end of the periods and net periodic benefit costs for the Other Postretirement Benefits, primarily health care, for U.S. plans were as follows:

	July 2 to December 31, 2018 (CSW OPEB)	Year Ended December 31, 2018 (Ryerson OPEB)	Year Ended December 31, 2017	Year Ended December 31, 2016
Discount rate for calculating obligations	4.23%	4.26%	3.57%	3.99%
Discount rate for calculating service cost	4.35	3.74	4.25	4.59
Discount rate for calculating interest cost	3.83	3.09	3.19	3.19
Rate of compensation increase – benefit obligations	N/A	3.00	3.00	2.50
Rate of compensation increase – net periodic benefit cost	N/A	3.00	2.50	2.80

The assumptions used to determine benefit obligations at the end of the periods and net periodic benefit costs for the Pension Benefits for Canadian plans were as follows:

	Year Ended December 31,									
	20	18	20	17	2016					
	Salaried	Bargaining	Salaried	Bargaining	Salaried	Bargaining				
Discount rate for calculating obligations	3.56%	3.58%	3.31%	3.32%	3.64%	3.71%				
Discount rate for calculating net periodic benefit cost	3.31	3.32	3.64	3.71	3.70	3.87				
Expected rate of return on plan assets	5.25	4.50	5.50	5.25	5.75	5.50				
Rate of compensation increase	3.00	3.00	3.00	3.00	3.25	3.25				

The expected rate of return on Canadian plan assets for 2019 is 5.25% for the Ryerson Salaried Plan (approximately 78% of total Canadian plan assets) and 3.50% for the Ryerson Bargaining Unit Plan (approximately 22% of total Canadian plan assets).

The assumptions used to determine benefit obligations at the end of the periods and net periodic benefit costs for the Other Postretirement Benefits, primarily healthcare, for Canadian plans were as follows:

	Year E	Year Ended December 31,						
	2018	2017	2016					
Discount rate for calculating obligations	3.53%	3.31%	3.54%					
Discount rate for calculating net periodic benefit cost	3.31	3.61	3.64					
Rate of compensation increase	3.00	3.00	3.25					

	 Year Ended December 31,						
	 Pension Benefits				Other B	enef	its
	 2018		2017		2018		2017
			(In mi	llion	s)		
Change in Benefit Obligation							
Benefit obligation at beginning of year	\$ 797	\$	803	\$	69	\$	74
Acquired benefit obligation	60		_		15		_
Service cost	2		1				
Interest cost	26		26		2		3
Actuarial (gain) loss	(42)		41		(8)		(1)
Effect of changes in exchange rates	(4)		3		(1)		1
Lump sums paid	(23)		(23)				
Benefits paid (net of participant contributions and Medicare subsidy)	(56)		(54)		(7)		(8)
Benefit obligation at end of year	\$ 760	\$	797	\$	70	\$	69
Accumulated benefit obligation at end of year	\$ 750	\$	795		N/A		N/A
Change in Plan Assets							
Plan assets at fair value at beginning of year	\$ 632	\$	587	\$	_	\$	_
Acquired plan assets	43				_		_
Actual return on plan assets	(40)		97		_		_
Employer contributions	27		22		7		8
Effect of changes in exchange rates	(3)		3		_		_
Lump sums paid	(23)		(23)		_		_
Benefits paid (net of participant contributions)	 (57)		(54)		(7)		(8)
Plan assets at fair value at end of year	\$ 579	\$	632	\$		\$	
Reconciliation of Amount Recognized					_		
Funded status	\$ (181)	\$	(165)	\$	(70)	\$	(69)
Amounts recognized in balance sheet consist of:							
Current liabilities	\$ _	\$	_	\$	(7)	\$	(7)
Non-current liabilities	 (181)		(165)		(63)		(62)
Net benefit liability at the end of the year	\$ (181)	\$	(165)	\$	(70)	\$	(69)

Canadian benefit obligations represented \$41 million of the Company's total Pension Benefits obligations at December 31, 2018 and \$46 million at December 31, 2017. Canadian plan assets represented \$38 million of the Company's total plan assets at fair value at December 31, 2018 and \$44 million at December 31, 2017. In addition, Canadian benefit obligations represented \$11 million of the Company's total Other Benefits obligation at December 31, 2018 and \$12 million at December 31, 2017.

The pension benefit obligations recorded as of December 31, 2018 and 2017 were impacted by changes in assumptions. During the year ended December 31, 2018 the pension benefit obligation decreased by \$46 million due to an increase in the year over year discount rate and decreased another \$1 million due to updated mortality rates based on updated mortality tables released by the Society of Actuaries in 2018. During the year ended December 31, 2017 the pension benefit obligation increased by \$47 million due to a decrease in the year over year discount rate, decreased \$5 million due to updated mortality rates based on updated mortality tables released by the Society of Actuaries in 2017, and decreased an additional \$4 million due to the demographic assumption studies concluded in 2017.

Amounts recognized in accumulated other comprehensive income (loss) at December 31, 2018 and 2017 consist of the following:

	 At December 31,							
	 Pension Benefits				Other Benefits			
	 2018 2017				2018 2		2017	
			(In mi	llions	3)			
Amounts recognized in accumulated other								
comprehensive income (loss), pre-tax, consist of								
Net actuarial loss (gain)	\$ 394	\$	372	\$	(58)	\$	(57)	
Prior service credit	 		<u> </u>		(6)		(9)	
Net loss (gain)	\$ 394	\$	372	\$	(64)	\$	(66)	

Net actuarial losses of \$14.8 million and prior service costs of \$0.1 million for pension benefits and net actuarial gains of \$7.7 million and prior service credits of \$3.1 million for other postretirement benefits are expected to be amortized from accumulated other comprehensive income (loss) into net periodic benefit cost in 2019.

Amounts recognized in other comprehensive income (loss) for the years ended December 31, 2018 and 2017 consist of the following:

		Year Ended December 31,							
		Pension Benefits				Other Benefits			
	2	2018 2017		2017	2	018	2	2017	
				(In mil	lions)				
Amounts recognized in other comprehensive									
income (loss), pre-tax, consist of									
Net actuarial loss (gain)	\$	38	\$	(15)	\$	(8)	\$	(1)	
Amortization of net actuarial loss (gain)		(16)		(14)		7		8	
Amortization of prior service cost		<u> </u>				3		3	
Net loss (gain)	\$	22	\$	(29)	\$	2	\$	10	

For benefit obligation measurement purposes for U.S. plans at December 31, 2018, the annual rate of increase in the per capita cost of covered health care benefits for participants under 65 was 7.5 percent, grading down to 4.5 percent in 2026, the level at which it is expected to remain. At December 31, 2018, the rate for participants over 65 was 7.5 percent, grading down to 4.5 percent in 2026, plus a risk adjustment of 0.65 percent grading down to zero percent in 2022, the level at which it is expected to remain. For measurement purposes for U.S. plans at December 31, 2017, the annual rate of increase in the per capita cost of covered health care benefits for participants under 65 was 7.0 percent, grading down to 4.5 percent in 2026, the level at which it is expected to remain. At December 31, 2017, the rate for participants over 65 was 7.0 percent, grading down to 4.5 percent in 2026, plus a risk adjustment of 0.65 percent grading down to zero percent in 2022, the level at which it is expected to remain.

For benefit obligation measurement purposes for Canadian plans at both December 31, 2018 and 2017, the annual rate of increase in the per capita cost of covered health care benefits was 7.3 percent per annum, grading down to 4.5 percent in 2033, the level at which it is expected to remain.

The components of the Company's net periodic benefit cost for the years ended December 31, 2018, 2017, and 2016 are as follows:

		Year Ended December 31,										
		Pe	nsio	n Benefit	ts			Other Benefits			S	
	2	018	2	2017		2016	20	18	20	2017		016
						(In mil	llions)					
Components of net periodic benefit cost												
Service cost	\$	2	\$	1	\$	1	\$		\$	_	\$	_
Interest cost		26		26		29		2		3		3
Expected return on assets		(40)		(42)		(45)				_		_
Recognized actuarial loss (gain)		15		15		13		(7)		(8)		(8)
Amortization of prior service credit		_						(3)		(3)		(3)
Net periodic benefit cost (credit)	\$	3	\$		\$	(2)	\$	(8)	\$	(8)	\$	(8)

The assumed health care cost trend rate has an effect on the amounts reported for the health care plans. For purposes of determining net periodic benefit cost for U.S plans, the annual rate of increase in the per capital cost of covered health care benefits for participants under 65 was 7.5 percent, grading down to 4.5 percent in 2026, the level at which it is expected to remain. The rate for participants over 65 was 7.75 percent, grading down to 4.5 percent in 2026, plus a risk adjustment of 0.65 percent grading down to zero percent in 2022, the level at which it is expected to remain. For purposes of determining net periodic benefit cost for Canadian plans, the annual rate of increase in the per capita cost of covered health care benefits was 7.3 percent per annum, grading down to 4.5 percent in 2033, the level at which it is expected to remain.

A one-percentage-point change in the assumed health care cost trend rate would have the following effects:

	1% inc	1% increase		1% decrease
		(In mi	llions)	
Effect on service cost plus interest cost	\$	0.2	\$	(0.2)
Effect on postretirement benefit obligation		3.4		(3.0)

Pension Trust Assets

The expected long-term rate of return on pension trust assets is 4.00% to 6.35% based on the historical investment returns of the trust, the forecasted returns of the asset classes, and a survey of comparable pension plan sponsors.

The Company's pension trust weighted-average asset allocations at December 31, 2018 and 2017, by asset category are as follows:

	Trust Assets : December 31	
	2018	2017
Equity securities	43%	57%
Debt securities	44	26
Real Estate	3	5
Other	10	12
Total	100%	100%

The Board of Directors of JT Ryerson has general supervisory authority over the Pension Trust Fund and approves the investment policies and plan asset target allocation. An internal management committee provides on-going oversight of plan assets in accordance with the approved policies and asset allocation ranges and has the authority to appoint and dismiss investment managers. The investment policy objectives are to maximize long-term return from a diversified pool of assets while minimizing the risk of large losses and to maintain adequate liquidity to permit timely payment of all benefits. The policies include diversification requirements and restrictions on concentrations in any one single issuer or asset class. The currently approved asset investment classes are cash, fixed income, domestic equities, international equities, real estate, private equities, and hedge funds of funds. Company management allocates the plan assets among the approved investment classes and provides appropriate directions to the investment managers pursuant to such allocations.

The approved target ranges and allocations as of the December 31, 2018 measurement date were as follows:

	Range	Target
Equity securities	28-66%	58%
Debt securities	20-63	29
Real estate	1-8	6
Other	0-16	7
Total		100%

The fair value of our pension plan assets at December 31, 2018 by asset category are as follows. See Note 14 for the definitions of Level 1, 2, and 3 fair value measurements.

Fair Value Measurements at									
Asset Category	<u></u>	Total Le		evel 1	Lev	el 2	Le	Level 3	
				(In mi	llions)				
Cash and cash equivalents	\$	21	\$	21	\$	_	\$	_	
Equity securities:									
US large cap		71		7		64		_	
US small/mid cap		22		1		21		_	
Canadian large cap		3		_		3		_	
Canadian small cap		1		_		1		_	
International companies		92		5		87		_	
Global companies		60		_		60		_	
Fixed income securities:									
Investment grade debt		255		18		237		_	
Other types of investments:									
Commodity funds		1				1		_	
Multi-strategy funds		1		_		1		_	
Investments valued at net asset value		37				_		_	
Real estate		15		1		14			
Total	\$	579	\$	53	\$	489	\$		

The fair value of our pension plan assets at December 31, 2017 by asset category are as follows:

	Fair Value Measurements at December 31, 2017							
Asset Category		Total		Level 1	L	evel 2	I	Level 3
	(In millions)							
Cash and cash equivalents	\$	15	\$	15	\$	_	\$	_
Equity securities:								
US large cap		89		_		89		
US small/mid cap		28		_		28		
Canadian large cap		5		_		5		_
Canadian small cap		1		_		1		_
International companies		146		_		146		_
Global companies		95		_		95		_
Fixed income securities:								
Investment grade debt		161		_		161		_
Other types of investments:								
Commodity funds		3		_		3		_
Multi-strategy funds		2		_		2		_
Investments valued at net asset value		53		_		_		_
Real estate		34		_		34		_
Total	\$	632	\$	15	\$	564	\$	

The pension assets classified as Level 2 investments in both 2018 and 2017 are part of common collective trust investments.

Certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy in accordance with ASU 2015-07, "Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)." The fair value amounts presented above are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the Consolidated Balance Sheets.

Securities listed on one or more national securities exchanges are valued at their last reported sales price on the date of valuation. If no sale occurred on the valuation date, the security is valued at the mean of the last "bid" and "ask" prices on the

valuation date. Corporate and government bonds which are not listed or admitted to trading on any securities exchanges are valued at the average mean of the last bid and ask prices on the valuation date based on quotations supplied by recognized quotation services or by reputable broker dealers. The non-publicly traded securities, other securities, or instruments for which reliable market quotations are not available are valued at each investment manager's discretion. Valuations will depend on facts and circumstances known as of the valuation date and application of certain valuation methods.

Contributions

The Company contributed \$27.0 million, \$21.7 million, and \$22.1 million for the years ended December 31, 2018, 2017, and 2016, respectively, to improve the funded status of the plans. The Company anticipates that it will have a minimum required pension contribution funding of approximately \$26 million in 2019.

Estimated Future Benefit Payments

	Pension Benefits	Other Benefits
	(In mi	llions)
2019	\$ 60	\$ 7
2020	58	6
2021	57	6
2022	57	6
2023	56	6
2024-2028	260	23

Multiemployer Pension and Other Postretirement Plans

We participate in two multiemployer pension plans covering 52 employees at 4 locations. Total contributions to the plans were \$0.4 million for each of the years ended December 31, 2018, 2017, and 2016. Our contributions represent less than 5% of the total contributions to the plans. The Company maintains positive employee relations at all locations. During 2012, the Company exited and reentered the pension plan at one of the covered locations in an effort to reduce the overall pension liability. The transaction resulted in a withdrawal liability of \$1.0 million, which will be paid over a period of 25 years. The balance of the withdrawal liability as of December 31, 2018 and 2017 was \$0.5 million. The Company's participation in these plans is not material to our financial statements.

Note 11: Commitments and Contingencies

Lease Obligations & Other

The Company leases buildings and equipment under noncancellable operating leases expiring in various years through 2028. Future minimum rental commitments are estimated to total \$101.6 million, including approximately \$21.7 million in 2019, \$19.2 million in 2020, \$17.0 million in 2021, \$13.3 million in 2022, \$10.5 million in 2023, and \$19.9 million thereafter.

Rental expense under operating leases totaled \$27.9 million, \$28.5 million, and \$30.0 million for the years ended December 31, 2018, 2017, and 2016, respectively.

The Company leases equipment under capital leases expiring in various years through 2024. Future minimum rental commitments are estimated to total \$33.8 million, including approximately \$13.7 million in 2019, \$11.2 million in 2020, \$5.7 million in 2021, \$2.5 million in 2022, \$0.6 million in 2023, and \$0.1 million thereafter.

To fulfill contractual requirements for certain customers in 2018, the Company has entered into certain fixed-price noncancellable contractual obligations. These purchase obligations aggregated to \$11.9 million at December 31, 2018 with \$11.9 million to be paid in 2019.

Concentrations of Various Risks

The Company's financial instruments consist of cash and cash equivalents, accounts receivable, equity securities, derivative instruments, accounts payable, and notes payable. In the case of cash, accounts receivable, equity securities, and accounts payable, the

carrying amount on the balance sheet approximates the fair value due to the short-term nature of these instruments. The derivative instruments are marked to market each period. The fair value of notes payable is disclosed in Note 14.

The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of derivative financial instruments and trade accounts receivable. Our derivative financial instruments are contracts placed with major financial institutions. Credit is generally extended to customers based upon an evaluation of each customer's financial condition, with terms consistent in the industry and no collateral required. Concentrations of credit risk with respect to trade accounts receivable are limited due to the large number of customers and their dispersion across geographic areas.

Approximately 9% of our total labor force is covered by collective bargaining agreements. There are collective bargaining agreements that will expire in fiscal 2019, which covers 2% of our total labor force. We believe that our overall relationship with our employees is good.

Litigation

In October 2011, the United States Environmental Protection Agency (the "EPA") named us as one of more than 100 businesses that may be a potentially responsible party for the Portland Harbor Superfund Site (the "PHS Site"). On January 6, 2017, the EPA issued an initial Record of Decision ("ROD") regarding the site. The ROD includes a combination of dredging, capping, and enhanced natural recovery that would take approximately thirteen years to construct plus additional time for monitored natural recovery, at an estimated present value cost of \$1.05 billion. At a meeting on December 4, 2018, the EPA announced that it expects parties to submit a plan to remediate the river and harbor per the original ROD within the next 2-3 years. It also expects allocation of amounts among the parties to be determined in the same time frame. It is willing to consider de minimus and de micromis settlements but is unlikely to approve any before completion of the remedial design process.

The EPA has not yet allocated responsibility for the contamination among the potentially responsible parties, including JT Ryerson. We do not currently have sufficient information available to us to determine whether the ROD will be executed as currently stated, whether and to what extent JT Ryerson may be held responsible for any of the identified contamination, and how much (if any) of the final plan's costs might ultimately be allocated to JT Ryerson. Therefore, management cannot predict the ultimate outcome of this matter or estimate a range of potential loss at this time.

There are various other claims and pending actions against the Company. The amount of liability, if any, for those claims and actions at December 31, 2018 is not determinable but, in the opinion of management, such liability, if any, will not have a material adverse effect on the Company's financial position, results of operations, or cash flows. We maintain liability insurance coverage to assist in protecting our assets from losses arising from or related to activities associated with business operations.

Note 12: Segment Information

We have one operating and reportable segment, metals service centers.

The Company derives substantially all of its sales from the distribution of metals. See Note 16: Revenue Recognition for the Company's percentage of sales by major product line.

No customer, including their subcontractors, accounted for more than 6 percent of Company sales for the years ended December 31, 2018, 2017, and 2016. The top ten customers accounted for less than 15 percent of our sales for the year ended December 31, 2018, and less than 17 percent of our sales for the years ended December 31, 2017 and 2016. A significant majority of the Company's sales are attributable to its U.S. operations and a significant majority of its long-lived assets are located in the United States. The only operations attributed to foreign countries relate to the Company's subsidiaries in Canada, China, and Mexico, which in aggregate comprised 10 percent, 12 percent, and 13 percent of the Company's sales during the years ended December 31, 2018, 2017, and 2016, respectively. Canadian, Chinese, and Mexican long-lived assets were 5 percent, 7 percent, and 7 percent of total Company long-lived assets at December 31, 2018, 2017, and 2016, respectively.

The following tables summarize consolidated financial information of our operations by geographic location based on where sales originated from:

	 Year Ended December 31,						
Net Sales	 2018	2016					
	(In millions)						
United States	\$ 3,950.5	\$	2,962.4	\$	2,485.9		
Foreign countries	 457.9		402.3		373.8		
Total	\$ 4,408.4	\$	3,364.7	\$	2,859.7		

	At December 31,										
Long-Lived Assets	_	2018	2017		2016						
			(In	millions)							
United States	\$	464.1	\$	395.3	\$	362.5					
Foreign countries		24.9		27.6		25.7					
Total	\$	489.0	\$	422.9	\$	388.2					

Note 13: Other Matters

Equity Investment

In 2011, Ryerson acquired a 38 percent equity interest in Automated Laser Fabrication Co., LLC ("ALF"). ALF is a steel processing company located in Streetsboro, Ohio. The Company accounts for this investment under the equity method of accounting. The Company's investment in this joint venture is not considered material to the Company's consolidated financial position or results of operations.

Liquidation of Investment in Foreign Entity

On February 17, 2012, the Company acquired 50 percent of the issued and outstanding capital stock of Açofran Aços e Metais Ltda ("Açofran"), a long products distributor located in São Paulo, Brazil. The Company fully consolidated Açofran based on voting control. The Company was party to a put option arrangement with respect to the securities that represent the noncontrolling interest of Açofran. The put was exercisable by the minority shareholders outside of the Company's control by requiring the Company to redeem the minority shareholders' equity stake in the subsidiary at a put price based on earnings before interest, income tax, depreciation and amortization expense, and net debt. The redeemable noncontrolling interest was classified as mezzanine equity and measured at the greater of estimated redemption value at the end of each reporting period or the historical cost basis of the noncontrolling interest adjusted for earnings and foreign currency allocations.

As of December 31, 2016, the Company substantially liquidated its investment in Acofran. In accordance with ASC 830-30-40, "Foreign Currency Matters," the Company reclassified the \$1.2 million accumulated foreign currency translation adjustment loss on the Consolidated Statement of Stockholders' Equity to Other income and (expense), net on the Consolidated Statement of Operations during 2016.

Note 14: Derivatives and Fair Value Measurements

Derivatives

The Company is exposed to certain risks relating to its ongoing business operations. The primary risks managed by using derivative instruments are interest rate risk, foreign currency risk, and commodity price risk. Interest rate swaps are entered into to manage interest rate risk associated with the Company's floating-rate borrowings. We use foreign currency exchange contracts to hedge variability in cash flows when a payment currency is different from our functional currency. From time to time, we may enter into fixed price sales contracts with our customers for certain of our inventory components. We may enter into metal commodity futures and options contracts to reduce volatility in the price of these metals. We may also enter into natural gas and diesel fuel price swaps to manage the price risk of forecasted purchases of natural gas and diesel fuel.

We have a receive variable, pay fixed, interest rate swap to manage the exposure to variable interest rates of the Ryerson Credit Facility. In March 2017, we entered into a forward agreement for \$150 million of "pay fixed" interest at 1.658%, "receive variable" interest to manage the risk of increasing variable interest rates. The interest rate reset dates and critical terms match the terms of our

existing debt and anticipated critical terms of future debt under the Ryerson Credit Facility. The fair value of the interest rate swap as of December 31, 2018 was an asset of \$1.5 million.

In accordance with FASB ASC 815, "Derivatives and Hedging" ("ASC 815"), the Company currently does not account for its commodity contracts and foreign exchange derivative contracts as hedges but rather marks them to market with a corresponding offset to current earnings. The Company accounts for its interest rate swap as a cash flow hedge of floating-rate borrowings with changes in fair value being recorded in accumulated other comprehensive income.

The Company regularly reviews the creditworthiness of its derivative counterparties and does not expect to incur a significant loss from the failure of any counterparties to perform under any agreements.

The following table summarizes the location and fair value amount of our derivative instruments reported in our Consolidated Balance Sheet as of December 31, 2018 and 2017:

	Asset Derivatives				Liability Derivatives						
			Fair Value			Fair			r Value		
	Balance Sheet Location	Dec	cember 31, 2018	De	cember 31, 2017	Balance Sheet Location		ember 31, 2018	Dec	cember 31, 2017	
					(In millio	ons)					
Derivatives not designated as hedging instruments under ASC 815											
Metal commodity contracts	Prepaid expenses and other current assets	\$	1.6	\$	2.8	Other accrued liabilities	\$	5.4	\$	3.9	
Foreign exchange contracts	Prepaid expenses and other current assets		0.2		0.1	Other accrued liabilities		_		_	
Derivatives designated as hedging instruments under ASC 815											
Interest rate swaps	Deferred charges and other assets		1.5		1.0	Taxes and other credits		_		_	
Total derivatives		\$	3.3	\$	3.9		\$	5.4	\$	3.9	

The following table presents the volume of the Company's activity in derivative instruments as of December 31, 2018 and 2017:

	Notional	Notional Amount						
Derivative Instruments	At December 31, 2018	At December 31, 2018 At December 31, 2017						
Nickel swap contracts	1,541	453	Tons					
Hot roll coil swap contracts	36,365	5,252	Tons					
Aluminum swap contracts	42,419	15,102	Tons					
Zinc swap contracts		3,402	Tons					
Foreign currency exchange contracts	4.5 million	5.1 million	U.S. dollars					
Interest rate swap	150 million	150 million	U.S. dollars					

The following table summarizes the location and amount of gains and losses on derivatives not designated as hedging instruments reported in our Consolidated Statements of Operations for the years ended December 31, 2018, 2017, and 2016:

		<u>(I</u>	n Derivatives	_		
			31,	_		
Derivatives not designated as hedging instruments under ASC 815	Location of Gain/(Loss) Recognized in Income on Derivatives	2	018	2017	2016	_
				(In millions)		
Metal commodity contracts	Cost of materials sold	\$	(3.1)	\$ 3.1	\$ 10.0)
Diesel fuel commodity contracts	Warehousing, delivery, selling, general, and administrative		_	_	0.1	1
Foreign exchange contracts	Other income and (expense), net		0.2	_	(0.1	1)
Total		\$	(2.9)	\$ 3.1	\$ 10.0)

The following table summarizes the location and amount of gains and losses on derivatives designated as hedging instruments reported in our Consolidated Statements of Operations for the years ended December 31, 2018, 2017, and 2016:

		Amount of Gain/(Loss) Reclassified from Other Comprehensive Incom Income				Income into
		Year Ended December 31,				
Derivatives designated as hedging	Location of Gain/(Loss) Recognized in Income					
instruments under ASC 815	on Derivatives		2018	2017		2016
				(In millions)		
Interest rate swaps	Interest and other expense on debt	\$	0.5	\$ (0.7)	\$	_

As of December 31, 2018, the portion of the \$1.5 million interest rate swap asset that would be reclassified into earnings during the next 12 months as interest income is approximately \$1.3 million.

Fair Value Measurements

To increase consistency and comparability, FASB ASC 820 "Fair Value Measurement" ("ASC 820") establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels as follows:

- Level 1—quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access as of the reporting date.
- 2. Level 2—inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data.
- 3. Level 3—unobservable inputs, such as internally-developed pricing models for the asset or liability due to little or no market activity for the asset or liability.

The following table presents assets and liabilities measured and recorded at fair value on our Consolidated Balance Sheets on a recurring basis and their level within the fair value hierarchy as of December 31, 2018:

		At December 31, 2018				
	L	Level 1 Level 2			Level 3	
			(In	millions)		
Assets						
Derivatives:						
Derivatives not designated as hedging instruments under ASC 815:						
Metal commodity contracts	\$	_	\$	1.6	\$	
Foreign exchange contracts		_		0.2		_
Derivatives designated as hedging instruments under ASC 815:						
Interest rate swaps		_		1.5		_
Total derivatives	\$		\$	3.3	\$	_
Liabilities						
Derivatives:						
Derivatives not designated as hedging instruments under ASC 815:						
Metal commodity contracts	\$		\$	5.4	\$	

The following table presents assets and liabilities measured and recorded at fair value on our Consolidated Balance Sheets on a recurring basis and their level within the fair value hierarchy as of December 31, 2017:

	At December 31, 2017					
	Level 1		Level 2		1	Level 3
			(In	millions)		
Assets						
Prepaid and other current assets:						
Equity securities	\$	0.1	\$	_	\$	_
Derivatives:						
Derivatives not designated as hedging instruments under ASC 815:						
Metal commodity contracts	\$	_	\$	2.8	\$	
Foreign exchange contracts		_		0.1		_
Derivatives designated as hedging instruments under ASC 815:						
Interest rate swaps				1.0		_
Total derivatives	\$		\$	3.9	\$	_
Liabilities						
Derivatives:						
Derivatives not designated as hedging instruments under ASC 815:						
Metal commodity contracts	\$		\$	3.9	\$	

The fair value of each derivative contract is determined using Level 2 inputs and the market approach valuation technique, as described in ASC 820. The Company has various commodity derivatives to lock in nickel and zinc prices for varying time periods. The fair value of these derivatives is determined based on the spot price each individual contract was purchased at and compared with the one-month daily average actual spot price on the London Metals Exchange for nickel and zinc on the valuation date. The Company also has commodity derivatives to lock in hot roll coil, iron ore, and aluminum prices for varying time periods. The fair value of hot roll coil, iron ore, and aluminum derivatives is determined based on the spot price each individual contract was purchased at and compared with the one-month daily average actual spot price on the Chicago Mercantile Exchange, the Singapore Exchange, and the London Metals Exchange, respectively, for the commodity on the valuation date. In addition, the Company has numerous foreign exchange contracts to hedge variability in cash flows when a payment currency is different from our functional currency. The Company defines the fair value of foreign exchange contracts as the amount of the difference between the contracted and current market value at the end of the period. The Company estimates the current market value of foreign exchange contracts by obtaining month-end market quotes of foreign exchange rates and forward rates for contracts with similar terms. The Company uses the exchange rates provided by Reuters. Each commodity and foreign exchange contract term varies in the number of months, but in general, contracts are between 3 to 12 months in length. The fair value of our interest rate swap is based on the sum of all future net present value cash flows for the fixed and floating leg of the swap. The future cash flows are derived based on the terms of our interest rate swap, as well as published discount factors, and projected forward LIBOR rates.

The carrying and estimated fair values of the Company's financial instruments at December 31, 2018 and 2017 were as follows:

	 At Decemb	er 31, 2018			At Decemb	er 31, 2	2017
	Carrying Amount	Fair Va	lue		rrying nount	Fa	ir Value
			(In mi	illions)			
Cash and cash equivalents	\$ 23.2	\$	23.2	\$	77.4	\$	77.4
Restricted cash	1.1		1.1		1.1		1.1
Receivables less provision for allowances, claims, and							
doubtful accounts	521.0		521.0		376.3		376.3
Accounts payable	390.2		390.2		275.0		275.0
Long-term debt, including current portion	1,153.3	1	,158.5		1,045.7		1,125.9

The estimated fair value of the Company's cash and cash equivalents, receivables less provision for allowances, claims, and doubtful accounts, and accounts payable approximate their carrying amounts due to the short-term nature of these financial

instruments. The estimated fair value of the Company's long-term debt and the current portions thereof is determined by using quoted market prices of Company debt securities (Level 2 inputs).

The fair values less costs to sell of long-lived assets held for sale are assessed each reporting period that they remain classified as held for sale. Any increase or decrease in the held for sale long-lived asset's fair value less cost to sell is reported as an adjustment to its carrying amount, except that the adjusted carrying amount cannot exceed the carrying amount of the long-lived asset at the time it was initially classified as held for sale. The fair values of each property were determined based on appraisals obtained from a third-party, pending sales contracts, or recent listing agreements with third-party brokerage firms (Level 2 inputs).

The following table presents assets and liabilities measured and recorded at fair value on the Consolidated Balance Sheets on a non-recurring basis and their level within the fair value hierarchy as of December 31, 2018:

	A	t Dece	mber 31, 20	18	
	Level 1		Level 2	_	Level 3
		(In	millions)		
Assets					
Prepaid expenses and other current assets - assets held for sale (Note 5)	\$ —	\$	7.8	\$	

There were no assets or liabilities classified as held for sale as of December 31, 2017.

Equity Securities

The Company had zero and \$0.1 million of equity securities, classified within "Prepaid expenses and other current assets," as of December 31, 2018 and 2017.

Subsequent to the adoption of ASU 2016-01, management values these investments at fair value with changes in fair value recognized in other income (expense), net. The amount of loss recognized in the Consolidated Statements of Operations in the year ended December 31, 2018 was \$0.1 million.

Prior to the adoption of ASU 2016-01, management valued these investments at fair value with changes in fair value recognized in accumulated other comprehensive income. The balance of \$1.0 million outstanding within accumulated other comprehensive income related to these investments at December 31, 2017 was reclassed to retained earnings upon the adoption of ASU 2016-01.

There is no maturity date for these investments. Sales for the years ended December 31, 2018, 2017, and 2016 were not material.

Note 15: Accumulated Other Comprehensive Income

The following table details the changes in accumulated other comprehensive income (loss) for the years ended December 31, 2018 and December 31, 2017:

Changes in Accumulated Other Comprehensive Income (Loss) by Component, net of tax Cash Flow Hedge -Foreign Benefit Currency Plan **Equity Interest Rate** Translation Liabilities Securities Swap (In millions) Balance at January 1, 2017 (50.2)(258.7) \$ 1.1 Other comprehensive income (loss) before reclassifications 8.6 15.4 (0.2)0.2 Amounts reclassified from accumulated other (3.0)0.1 0.4 comprehensive income (loss) 8.6 12.4 (0.1)0.6 Net current-period other comprehensive income (loss) Balance at December 31, 2017 (41.6) \$ (246.3) 1.0 \$ 0.6 Other comprehensive income (loss) before reclassifications 0.7 (11.2)(13.9)Amounts reclassified from accumulated other (0.3)comprehensive income (loss) (3.8)(1.0)(11.2)(17.7)(1.0)0.4 Net current-period other comprehensive income (loss) Balance at December 31, 2018 (52.8) (264.0)1.0

The following tables detail the reclassifications out of accumulated other comprehensive income (loss) for the years ended December 31, 2018 and December 31, 2017:

	Reclassifications Out of Accumulated Other Comprehensive Income (Loss)					
Details about Accumulated Other Comprehensive Income (Loss) Components	Acco Comp For Dec	t reclassified from imulated Other rehensive Income (Loss) the Year Ended ember 31, 2018 In millions)	Affected line item in the Consolidated Statements of Operations / Consolidated Balance Sheet			
Amortization of defined benefit pension	(in minions)				
and other post-retirement benefit plan items						
Actuarial gain	\$	(8.1)	Warehousing, delivery, selling, general, and administrative			
	•	(412)	Warehousing, delivery, selling,			
Prior service cost		3.0	general, and administrative			
Total before tax	'	(5.1)				
Tax provision		1.3				
Net of tax	\$	(3.8)				
Change in accounting principal (ASU 2016-01)						
Change in accounting principal (ASU 2016-01)	\$	(1.0)	Retained earnings (accumulated deficit)			
Tax provision		<u> </u>				
Net of tax	\$	(1.0)				
Cash flow hedge - interest rate swap						
Realized swap interest income	\$	(0.5)	Interest and other expense on debt			
Tax provision		0.2				
Net of tax	\$	(0.3)				

	Reclassifications Out of Accumulated Other Comprehensive Income (Loss)						
Details about Accumulated Other Comprehensive Income (Loss) Components		ount reclassified from Accumulated Other omprehensive Income (Loss)	Affected line item in the Consolidated Statements of Operations				
		For the Year Ended December 31, 2017 (In millions)					
Amortization of defined benefit pension and other post-retirement benefit plan items							
Actuarial gain	\$	(6.9)	Warehousing, delivery, selling, general, and administrative				
Prior service cost		2.9	Warehousing, delivery, selling, general, and administrative				
Total before tax		(4.0)					
Tax provision		1.0					
Net of tax	\$	(3.0)					
Other-than-temporary impairment							
Other-than-temporary impairment charge	\$	0.2	Other income and (expense), net				
Tax benefit		(0.1)					
Net of tax	\$	0.1					
Cash flow hedge - interest rate swap							
Realized swap interest loss	\$	0.7	Interest and other expense on debt				
Tax benefit		(0.3)					
Net of tax	\$	0.4					

Note 16: Revenue Recognition

We are a leading metals service center that distributes and provides value-added processing of industrial metals with operations in the United States, Canada, Mexico, and China. We purchase large quantities of metal products from primary producers and sell these materials in smaller quantities to a wide variety of metals-consuming industries. More than 75% of the metals products sold are processed by us by burning, sawing, slitting, blanking, cutting to length, or other techniques.

Revenue Accounting Policy

In May 2014, the FASB issued ASC 606 which supersedes the revenue recognition requirements in ASC 605, and requires entities to recognize revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services.

The Company adopted ASC 606 as of January 1, 2018 using the modified retrospective transition method. The cumulative effect of initially applying the new standard was recorded as an adjustment to the opening balance of retained earnings within our Condensed Consolidated Balance Sheet. The adjustment to retained earnings was the result of changing the accounting for revenues associated with custom products with no alternative use for which we have an enforceable right to payment, from point in time recognition to over time recognition. The revenues associated with the products and services that were partially satisfied at January 1, 2018 which were included in the modified transition method adjustment aggregated \$12.3 million. The net impact on retained earnings associated with these revenues was \$2.3 million. For all adjustments and changes as a result of adopting ASC 606 for the current period, please refer to the section "Impacts on Financial Statements" below. In accordance with the modified retrospective transition method, the historical information within the financial statements has not been restated and continues to be reported under the accounting standard in effect for those periods. As a result, the Company has disclosed the accounting policies in effect prior to January 1, 2018, as well as the policies it has applied starting January 1, 2018.

Periods prior to January 1, 2018

Revenue is recognized in accordance with ASC 605. Revenue is recognized upon delivery of product to customers and is recorded net of returns, allowances, customer discounts, and incentives. Sales taxes collected from customers and remitted to governmental authorities are accounted for on a net (excluded from revenues) basis.

Periods commencing January 1, 2018

Revenue is recognized based on the consideration expected to be received for delivery of as-is or processed metal products when, or as, the Company satisfies its contractual obligation to transfer control of a product to a customer, which we refer to as a performance obligation. Predominately all of our contracts contain a single performance obligation.

The majority of our revenue is recognized at a point in time. The Company has determined that the most definitive demonstration that control has transferred to a customer is physical delivery, with the exception of bill and hold and consignment transactions. The Company's bill-and-hold transactions are arrangements where a customer requests that we bill them for a product even though we retain physical possession of the product until it is subsequently delivered to the customer. Bill and hold revenue is recorded when all of the criteria within ASC 606 are met. Consignment transactions are arrangements where the Company transfers product to a customer location but retains ownership and control of such product until it is used by the customer. Revenue for consignment arrangements is recognized upon the customer's usage.

Revenues associated with products which we believe have no alternative use, and where the Company has an enforceable right to payment, are recognized on an over time basis. Products with no alternative use include products made from unique alloys, custom extrusions, non-standard gauges, items that been processed to a custom size that cannot be cost effectively reworked to a standard size, or items processed to customer specific drawings or specifications. Over-time revenues are recorded in proportion with the progress made toward completing the performance obligation.

Ryerson uses both input and output methods of measuring progress towards completion based on the type and extent of processing completed. Input methods are used for complex processing with multiple steps occurring over multiple days. Under the input method, the measure of performance, commonly called percentage of completion, is the ratio of costs incurred to date to the total estimated costs at completion for the products. Output methods are used for products with minimal processing where the normal pattern of production is less than one day. In these cases, the progress towards completion is measured based on the number of products on hand and ready for delivery in comparison to the total number of products in the order.

Significant judgment is required in determining which products qualify for over time revenue recognition, the methodology to be used in calculating the progress toward completion, and estimating the costs incurred to date and the total cost at completion.

Revenue is recorded net of returns, allowances, customer discounts, and incentives. Sales taxes collected from customers and remitted to governmental authorities are accounted for on a net (excluded from revenues) basis.

Prices are generally fixed at the time of order confirmation. At each quarter end, the Company calculates an estimate of potential cash discounts and returns and allowances that could be taken by customers that are associated with outstanding accounts receivable, as well as estimates of customer rebates. Cash discounts and returns and allowances are calculated based on historical experience. Customer rebates are estimated based on actual sales and projections over the rebate period.

The Company has elected to treat shipping and handling costs as an activity necessary to fulfill the performance obligation to transfer product to the customer and not as a separate performance obligation. Shipping and handling costs are estimated at quarter end in proportion to revenue recognized for transactions where actual costs are not yet known. Shipping and handling costs are included in Warehousing, delivery, selling, general, and administrative expense. The balance recognized related to shipping and handling costs was a net contract liability of \$0.1 million as of December 31, 2018.

The Company's performance obligations are typically short-term in nature. As a result, the Company has elected the practical expedient that provides an exemption of the disclosure requirements regarding information about remaining performance obligations on contracts that have original expected durations of one year or less.

Disaggregated Revenue

We have one operating and reportable segment, metals service centers.

The Company derives substantially all of its sales from the distribution of metals. The following table shows the Company's percentage of sales by major product line:

Product Line	2018	2017	2016
Carbon Steel Flat	27%	28%	28%
Carbon Steel Plate	11	10	9
Carbon Steel Long	14	12	13
Stainless Steel Flat	16	18	17
Stainless Steel Plate	4	4	4
Stainless Steel Long	4	4	3
Aluminum Flat	15	15	16
Aluminum Plate	3	3	3
Aluminum Long	4	4	5
Other	2	2	2
Total	100%	100%	100%

A significant majority of the Company's sales are attributable to its U.S. operations. The only operations attributed to foreign countries relate to the Company's subsidiaries in Canada, China, and Mexico. The following table summarizes consolidated financial information of our operations by geographic location based on where sales originated:

	Years Ended December 31,						
Net Sales	2018		2017			2016	
		_	(Ir	millions)		_	
United States	\$	3,950.5	\$	2,962.4	\$	2,485.9	
Foreign countries		457.9		402.3		373.8	
Total	\$	4,408.4	\$	3,364.7	\$	2,859.7	

As stated above, revenue is recognized either at a point in time or over time based on if the contract has an enforceable right to payment and the type of product that is being sold to the customer with products that are determined to have no alternative use being recognized over time. The following table summarizes revenues by the type of item sold:

Timing of Revenue Recognition	Year Ended December 31, 2018
Revenue on products with an alternative use	88%
Revenue on products with no alternative use	12
Total	100%

Contract Balances

A receivable is recognized in the period in which an invoice is issued, which is generally when the product is delivered to the customer. Payment terms on invoiced amounts are typically 30 days from the invoice date. We do not have any contracts with significant financing components.

Receivables, which are included in accounts receivables within the Consolidated Balance Sheet, from contracts with customers were \$523.5 million and \$381.2 million as of December 31, 2018 and at the adoption of ASC 606, respectively.

Contract assets, which consist primarily of revenues recognized over time that have not yet been invoiced and estimates of the value of inventory that will be received in conjunction with product returns, are reported in prepaid expenses and other current assets within the Consolidated Balance Sheet. Contract liabilities, which consist primarily of accruals associated with amounts that will be paid to customers for volume rebates, cash discounts, sales returns and allowances, estimates of shipping and handling costs associated with performance obligations recorded over time, and bill and hold transactions are reported in other accrued liabilities within the Consolidated Balance Sheet. Significant changes in the contract assets and the contract liabilities balances during the period are as follows:

	I	Year E December	
			Contract Liabilities
Beginning Balance	\$	(In mill 14.2	
Transferred to receivables from contract assets recognized at January 1, 2018		(12.3)	_
Satisfied contract liability from beginning of the period		_	(7.6)
Contract liability incurred during the period		_	8.2
Net contract assets and liabilities added for products with no alternative during the period		10.9	0.2
Contract assets and liabilities acquired		0.5	_
Changes to reserves		1.5	0.5
Reclass from contract liability to contract asset		1.8	1.8
Ending Balance	\$	16.6	\$ 10.0

Impacts on Financial Statements

The following table summarizes the impacts of adopting ASC 606 on the Company's current year Consolidated Statement of Operations:

	Year Ended December 31, 2018						
	_	As Reported ASC 606 Adjustments		Balances without adoption of ASC 606			
Net sales	\$	4,408.4	\$ 1.4	\$ 4,409.8			
Cost of materials sold		3,650.3	3.3	3,653.6			
Gross profit		758.1	(1.9)	756.2			
Warehousing, delivery, selling, general, and administrative		614.7	0.1	614.8			
Restructuring and other charges		4.2		4.2			
Operating profit		139.2	(2.0)	137.2			
Other income and (expense), net		76.7	_	76.7			
Interest and other expense on debt		(99.2)		(99.2)			
Income before income taxes		116.7	(2.0)	114.7			
Provision for income taxes		10.3	(0.5)	9.8			
Net income		106.4	(1.5)	104.9			
Less: Net income attributable to noncontrolling interest		0.4		0.4			
Net income attributable to Ryerson Holding Corporation	\$	106.0	\$ (1.5)	\$ 104.5			
Basic earnings per share	\$	2.84	\$ (0.04)	\$ 2.80			
Diluted earnings per share	\$	2.81	\$ (0.04)	\$ 2.77			

The following table summarizes the impacts of adopting ASC 606 on the Company's current year Consolidated Statement of Cash Flows:

	As reported December 31, 2018	ASC 606 Adjustments (In millions)	Balances without adoption of ASC 606
Operating activities:			
Net income	\$ 106.4	\$ (1.5)	\$ 104.9
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Deferred income taxes	\$ 7.8	\$ (0.5)	7.3
Other non cash adjustments	(2.0)	_	(2.0)
Change in operating assets and liabilities:			
Receivables	(64.8)	1.8	(63.0)
Inventories	(21.4)	2.3	(19.1)
Other assets	(7.3)	1.7	(5.6)
Accounts payable	58.4	_	58.4
Accrued liabilities	16.8	(3.8)	13.0
Accrued taxes payable/receivable	2.2	_	2.2
Deferred employee benefit costs	(38.7)		(38.7)
Net adjustments	(49.0)	1.5	(47.5)
Net cash used in operating activities	57.4		57.4

The following table summarizes the impacts of adopting ASC 606 on the Company's current year Consolidated Balance Sheets:

	As reported December 31, 2018	ASC 606 Adjustments (In millions)	Balances without adoption of ASC 606
Cash, cash equivalents, and restricted cash	\$ 24.3	\$	\$ 24.3
Accounts receivable, net	521.0	(4.5)	516.5
Inventories	806.3	8.5	814.8
Prepaid expenses and other current assets	61.5	(16.5)	45.0
Total current assets	1,413.1	(12.5)	1,400.6
Property, plant, and equipment, net	489.0	_	489.0
Goodwill	120.3	0.3	120.6
Other noncurrent assets	63.9		63.9
Total assets	\$ 2,086.3	\$ (12.2)	\$ 2,074.1
Accounts payable	\$ 390.2	\$ —	\$ 390.2
Salaries, wages, and commissions	66.6	_	66.6
Other accrued liabilities	77.0	(7.1)	69.9
Short-term debt	27.3	_	27.3
Current portion of deferred employee benefits	7.9		7.9
Total current liabilities	569.0	(7.1)	561.9
Long-term debt	1,126.0	_	1,126.0
Deferred employee benefits	258.4	_	258.4
Other noncurrent liabilities	57.0	(1.3)	55.7
Total liabilities	2,010.4	(8.4)	2,002.0
Retained Earnings	14.2	(3.8)	10.4
Additional paid-in capital, accumulated other			
comprehensive loss, and noncontrolling interest	61.7		61.7
Total equity	75.9	(3.8)	72.1
Total liabilities and equity	\$ 2,086.3	\$ (12.2)	\$ 2,074.1

Note 17: Income Taxes

The elements of the provision (benefit) for income taxes were as follows:

		Year Ended December 31,					
		2018	2017		2016		
			(In millions)				
Income before income tax:							
U.S.	\$	100.6	\$ 11.3	\$	20.1		
Foreign		16.1	5.4		6.0		
	\$	116.7	\$ 16.7	\$	26.1		
Current income taxes:							
Federal	\$	(1.3)	\$ 5.6	\$	(0.3)		
Foreign		3.7	1.8		2.8		
State	_	0.1	0.5		<u> </u>		
		2.5	7.9	· ·	2.5		
Deferred income taxes		7.8	(9.2)		4.7		
Total income tax provision (benefit)	\$	10.3	\$ (1.3)	\$	7.2		

Income taxes differ from the amounts computed by applying the federal tax rate as follows:

	Year Ended December 31,						
	2	018	2017		2016		
			(In millions)				
Federal income tax expense computed at statutory							
tax rate of 21% in 2018 and 35% in 2017 and 2016	\$	24.5	\$ 5.8	\$	9.1		
Additional taxes or credits from:							
State and local income taxes, net of federal income tax							
effect		1.4	(0.8)		(0.7)		
Non-deductible expenses and non-taxable income		(13.6)	0.2		(1.2)		
Foreign income (expense) not includable in federal taxable income		0.9	(0.2)		2.8		
Valuation allowance changes (net)		(4.3)	(2.9)		(2.6)		
Changes in uncertain tax positions		_	(1.0)		(0.3)		
Effect of U.S. Tax Cuts and Jobs Act - deemed repatriation							
transaction tax & GILTI		0.8	7.2		_		
Effect of U.S. Tax Cuts and Jobs Act - revaluation of deferred taxes		_	(10.6)		_		
All other, net		0.6	1.0		0.1		
Total income tax provision (benefit)	\$	10.3	\$ (1.3)	\$	7.2		

The U.S. Tax Cuts and Jobs Act (the "Act"), enacted on December 22, 2017, significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018 and creating a territorial tax system with a one-time mandatory tax on previously deferred foreign earnings of U.S. subsidiaries. Under ASC Topic 740, the effects of changes in tax rates and laws on deferred tax balances are recognized in the period in which the new legislation is enacted. As a result of the Act, we had recorded a benefit for the revaluation of our deferred tax assets of \$10.6 million during the fourth quarter of 2017 within the provision (benefit) for income taxes line of the Consolidated Statement of Operations.

The Act subjects a US shareholder to tax on global intangible low-taxed income ("GILTI") earned by certain foreign subsidiaries. The FASB Staff Q&A, Topic 740, No. 5, *Accounting for Global Intangible Low-Taxed Income*, states that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or provide for the tax expense related to GILTI in the year the tax is incurred. After considering the two options, the Company has elected to provide for the tax expense related to GILTI in the year the tax will occur. For the year ending Dec. 31, 2018, we have included \$0.5 million of tax expense related to GILTI.

The components of the deferred income tax assets and liabilities arising under FASB ASC 740, "Income Taxes" ("ASC 740") were as follows:

		At December 31,				
	20)18	2017			
		(In millions)				
Deferred tax assets:						
AMT tax credit carryforwards	\$	30 \$	30			
Post-retirement benefits other than pensions		18	15			
Federal and foreign net operating loss carryforwards		51	59			
State net operating loss carryforwards		20	19			
Pension liability		48	46			
Other deductible temporary differences		54	27			
Less: valuation allowances		(29)	(24)			
	\$	192 \$	172			
Deferred tax liabilities:						
Fixed asset basis difference	\$	65 \$	53			
Inventory basis difference		127	92			
Other intangibles		13	9			
		205	154			
Net deferred tax (liability) asset	\$	(13) \$	18			

The deferred tax liability as of December 31, 2018 is included within Other noncurrent liabilities in the Consolidated Balance Sheet. The Company will continue to maintain a valuation allowance on certain U.S. federal and state deferred tax assets until such time as in management's judgment, considering all available positive and negative evidence, the Company determines that these deferred tax assets are more likely than not realizable.

The Company had available at December 31, 2018, federal AMT credit carryforwards of approximately \$30 million, which as a result of the Act will be refundable beginning in 2019 to the extent not utilized to offset future federal income tax liabilities of the Company.

The Company's deferred tax assets also include \$48 million related to U.S. federal net operating loss ("NOL") carryforwards which expire in 20 years, \$20 million related to state NOL carryforwards which expire generally in 1 to 20 years, and \$5 million related to foreign NOL carryforwards which expire in 1 to 5 years, available at December 31, 2018.

Earnings from the Company's foreign subsidiaries are considered to be indefinitely reinvested and, accordingly, no provision for U.S. federal and state income taxes or foreign withholding tax has been made in our consolidated financial statements related to the indefinitely reinvested earnings. At December 31, 2018, the Company had approximately \$112 million of undistributed foreign earnings, predominately in Canada and China. As a result of the US Tax Cuts and Jobs Act passed during 2017, a significant portion of these earnings were deemed repatriated. At December 31, 2018, the Company has recorded a \$7.5 million US tax liability on this deemed distribution ("Transition Tax"). Of the \$7.5 million tax expense, \$0.8 million is reflected in our deferred tax balances and \$6.7 million is reflected in income taxes payable. Were the Company to distribute these non-U.S. earnings in the form of dividends or otherwise in the future, it would no longer be subject to U.S. federal income taxes. A determination of the amount of any unrecognized deferred income tax liability on the undistributed earnings is predominately dependent upon the applicability of foreign withholding taxes and potential U.S. state income taxes. Modeling of the many future potential scenarios and the related unrecognized deferred tax liability is therefore not practicable. None of the Company's other foreign subsidiaries have a material amount of assets available for repatriation.

The Company accounts for uncertain income tax positions in accordance with ASC 740. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	_	Unrecognized Tax Benefits
		(In millions)
Unrecognized tax benefits balance at January 1, 2016	\$	7.6
Gross increases – tax positions in current periods		_
Settlements and closing of statute of limitations		(0.3)
Unrecognized tax benefits balance at December 31, 2016	\$	7.3
Gross increases – tax positions in current periods		_
Settlements and closing of statute of limitations		(1.0)
Unrecognized tax benefits balance at December 31, 2017	\$	6.3
Gross decreases – tax positions in current periods		_
Settlements and closing of statute of limitations		(1.9)
Unrecognized tax benefits balance at December 31, 2018	\$	4.4

The Company and its subsidiaries are subject to U.S. federal income tax as well as income tax of multiple state and foreign jurisdictions. The Company has substantially concluded all U.S. federal income tax matters for all years through 2009. Substantially all state and local income tax matters have been concluded through 2006. The Company has substantially concluded foreign income tax matters through 2009 for all significant foreign jurisdictions.

We recognize interest and penalties related to uncertain tax positions in income tax expense. We had approximately \$1.9 million of accrued interest related to uncertain tax positions at December 31, 2018 and 2017, respectively. The total amount of unrecognized tax benefits that would affect our effective tax rate if recognized was \$4.7 and \$4.6 million as of December 31, 2018 and 2017, respectively.

Note 18: Earnings Per Share

On July 16, 2007, Ryerson Holding was capitalized with 21,250,000 shares of common stock by Platinum Equity, LLC. On August 13, 2014, Ryerson Holding completed an initial public offering of 11 million shares of common stock at a price to the public of \$11.00 per share. On July 25, 2016, Ryerson Holding closed an underwritten public offering of 5 million shares of common stock at a price to the public of \$15.25 per share. All shares outstanding are common shares and have equal voting, liquidation, and preference rights.

Basic earnings per share attributable to Ryerson Holding's common stock is determined based on earnings for the period divided by the weighted average number of common shares outstanding during the period. Diluted earnings per share attributable to Ryerson Holding's common stock considers the effect of potential common shares, unless inclusion of the potential common shares would have an antidilutive effect. Stock-based awards with a grant price greater than the average market price of our common stock are excluded from the calculation of diluted earnings per share because the impact would have been antidilutive. The weighted average number of shares excluded were zero, 100,068, and zero for the twelve-month periods ended December 31, 2018, 2017, and 2016, respectively.

The following table sets forth the calculation of basic and diluted earnings per share:

	Years Ended December 31,							
Basic and diluted earnings per share	2018			2017		2016		
		(In millions,	excep	t share and per	share	data)		
Numerator:								
Net income attributable to Ryerson Holding Corporation	\$	106.0	\$	17.1	\$	18.7		
Denominator:								
Weighted average shares outstanding		37,329,580		37,176,398		34,295,829		
Dilutive effect of stock-based awards		342,732		117,804		105,417		
Weighted average shares outstanding adjusted for dilutive securities		37,672,312		37,294,202		34,401,246		
Earnings per share								
Basic	\$	2.84	\$	0.46	\$	0.55		
Diluted	\$	2.81	\$	0.46	\$	0.54		

Note 19: Subsequent Events

In January 2019, a principal amount of \$11.6 million of the 2022 Notes were repurchased for \$11.8 million and retired, resulting in the recognition of a \$0.2 million loss.

RYERSON HOLDING CORPORATION AND SUBSIDIARY COMPANIES SUPPLEMENTARY FINANCIAL DATA (UNAUDITED) SUMMARY BY QUARTER

(In millions except per share data)

2017	N	et Sales	_Gro	oss Profit]	ome (Loss) Before Income Taxes	N	let Income	At to	et Income tributable Ryerson Holding orporation	Ea	Basic rnings per Share	Ear	Diluted rnings per Share
2017 First Quarter	\$	814.5	\$	160.6	\$	21.8	\$	15.0	\$	14.8	\$	0.40	\$	0.40
Second Quarter (1)	Ψ	875.4	ψ	140.4	Ψ		Ψ	0.8	Ψ	0.6	Ψ	0.40	Ψ	0.40
Third Quarter		864.2		145.0		1.2		1.9		1.7		0.05		0.05
Fourth Quarter		810.6		136.5		(6.3)		0.3		_		_		_
Year	\$	3,364.7	\$	582.5	\$	16.7	\$	18.0	\$	17.1	\$	0.46	\$	0.46
2018														
First Quarter	\$	941.3	\$	164.9	\$	14.7	\$	10.6	\$	10.4	\$	0.28	\$	0.28
Second Quarter		1,057.1		185.3		23.6		17.4		17.5		0.47		0.46
Third Quarter (2)		1,250.0		208.2		79.7		77.7		77.5		2.08		2.06
Fourth Quarter (3)		1,160.0		199.7		(1.3)		0.7		0.6		0.01		0.01
Year	\$	4,408.4	\$	758.1	\$	116.7	\$	106.4	\$	106.0	\$	2.84	\$	2.81

⁽¹⁾ Included in the second quarter 2017 results is a \$0.2 million charge due to an other-than-temporary impairment recognized on an equity investment.

⁽²⁾ The third quarter 2018 includes a \$73.2 million gain on bargain purchase related to our Central Steel and Wire acquisition.

⁽³⁾ The fourth quarter 2018 includes a \$3.2 million reduction to the gain on bargain purchase related to our Central Steel and Wire acquisition as well as a \$1.7 million loss on the repurchase of \$50.5 million principal of the 2022 Notes.

RYERSON HOLDING CORPORATION (Parent Company Only)

STATEMENTS OF OPERATIONS (In millions)

	_	Year ended December 31,							
		20	18		2017		2016		
Administrative and other expenses		\$	(0.9)	\$	(0.8)	\$	(0.8)		
Interest income on intercompany loans			6.4		6.5		_		
Equity in income of subsidiaries			110.9		23.6		3.4		
Income before income taxes	•		116.4		29.3		2.6		
Provision (benefit) for income taxes			10.4		12.2		(16.1)		
Net income		\$	106.0	\$	17.1	\$	18.7		

RYERSON HOLDING CORPORATION (Parent Company Only)

STATEMENTS OF COMPREHENSIVE INCOME (In millions)

	Year Ended December 31,							
	2	2018	2017	1		2016		
Net income	\$	106.0	\$	17.1	\$	18.7		
Other comprehensive income (loss), before tax:								
Foreign currency translation adjustments		(8.2)		5.4		1.1		
Gain (loss) on intra-entity foreign currency transactions		(3.0)		3.2		1.3		
Unrealized loss on equity investments		_		(0.3)		(1.8)		
Other-than-temporary impairment on equity investments				0.2		4.7		
Liquidation of investment in foreign entity		_		_		1.2		
Gain on cash flow hedges		0.5		1.0				
Changes in defined benefit pension and other post-retirement benefit								
plans		(22.3)		18.0		(10.6)		
Other comprehensive income (loss), before tax		(33.0)		27.5		(4.1)		
Income tax provision (benefit) related to items of other comprehensive								
income (loss)		(4.5)		6.0		(3.3)		
Comprehensive income, after tax	\$	77.5	\$	38.6	\$	17.9		

RYERSON HOLDING CORPORATION (Parent Company Only)

STATEMENTS OF CASH FLOWS (In millions)

	Year ended December 31,						
		2018		2017		2016	
Operating Activities:							
Net income	\$	106.0	\$	17.1	\$	18.7	
Adjustments to reconcile net income to net cash provided by operating activities:							
Equity in earnings of subsidiaries		(110.9)		(23.6)		(3.4)	
Deferred income taxes		10.4		12.2		(16.1)	
(Increase) decrease in receivables/payables from subsidiaries		(5.4)		(5.6)		1.5	
Increase in other assets		(0.1)		_		_	
Increase (decrease) in accrued liabilities		<u> </u>		<u> </u>		(0.5)	
Net adjustments		(106.0)		(17.0)		(18.5)	
Net cash provided by operating activities				0.1		0.2	
Investing Activities:							
Loan to related company				_		(71.7)	
Net cash used in investing activities						(71.7)	
Financing activities:							
Net proceeds from issuance of common stock		_		_		71.5	
Net cash provided by financing activities						71.5	
Net increase in cash and cash equivalents				0.1			
Cash and cash equivalents—beginning of period		0.1		_		_	
Cash and cash equivalents—end of period	\$	0.1	\$	0.1	\$	_	

RYERSON HOLDING CORPORATION (Parent Company Only)

BALANCE SHEETS (In millions, except shares)

	 At December 31,				
	 2018		2017		
Assets					
Cash and cash equivalents	\$ 0.1	\$	0.1		
Prepaid expenses and other assets	0.1		_		
Receivable from subsidiaries	 9.5		4.1		
Total current assets	9.7		4.2		
Long-term receivable from subsidiaries	71.7		71.7		
Deferred income taxes	 23.4		33.8		
Total assets	\$ 104.8	\$	109.7		
Liabilities					
Accrued liabilities	\$ 0.1	\$	0.1		
Total current liabilities	0.1		0.1		
Dividends in excess of investment in subsidiaries	31.5		119.6		
Total liabilities	31.6		119.7		
Ryerson Holding Corporation Stockholders' equity (deficit)					
Preferred stock, \$0.01 par value; 7,000,000 shares authorized and no shares issued at 2018 and 2017	_		_		
Common stock, \$0.01 par value; 100,000,000 shares authorized and 37,656,505 shares issued at 2018; 100,000,000 shares authorized and 37,421,081 issued at 2017	0.4		0.4		
Capital in excess of par value	381.0		377.6		
Retained earnings (accumulated deficit)	14.2		(95.1)		
Treasury stock at cost – Common stock of 212,500 shares in 2018 and 2017	(6.6)		(6.6)		
Accumulated other comprehensive loss	 (315.8)		(286.3)		
Total Ryerson Holding Corporation stockholders' equity (deficit)	73.2		(10.0)		
Total liabilities and stockholders' equity	\$ 104.8	\$	109.7		

RYERSON HOLDING CORPORATION (Parent Company Only)

NOTES TO FINANCIAL STATEMENTS (In millions)

Note 1: Basis of presentation

In the parent company only financial statements, Ryerson Holding's investment in subsidiaries is stated at cost plus equity in undistributed earnings of subsidiaries since the date of acquisition. Ryerson Holding's share of net income (loss) of its unconsolidated subsidiaries is included in consolidated income using the equity method. The parent company only financial statements should be read in conjunction with the Company's consolidated financial statements.

Note 2: Guarantees

Ryerson Holding unconditionally guarantees the 2022 Notes, jointly and severally with the other guarantors of the 2022 Notes.

Note 3: Dividends from subsidiaries

There were no cash dividends paid to Ryerson Holding from its consolidated subsidiaries for the years ended December 31, 2018, 2017, and 2016.

RYERSON HOLDING CORPORATION AND SUBSIDIARY COMPANIES SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS FOR THE YEARS ENDED DECEMBER 31, 2018, 2017, AND 2016 (In millions)

	Balanc Beginn of Per	ing	(Additions Charged (Credited) to Income	Deductions from Reserves	Balance at End of Period
Year Ended December 31, 2018						
Allowance for doubtful accounts	\$	4.9	\$	2.4	\$ (4.8)(A)(B)	\$ 2.5
Valuation allowance—deferred tax assets		24.4		7.0	(2.1) (C)	29.3
Year Ended December 31, 2017						
Allowance for doubtful accounts	\$	4.6	\$	1.5	\$ (1.2)(A)	\$ 4.9
Valuation allowance—deferred tax assets		20.0		4.4	_	24.4
Year Ended December 31, 2016						
Allowance for doubtful accounts	\$	5.2	\$	3.1	\$ (3.7)(A)	\$ 4.6
Valuation allowance—deferred tax assets		22.6		(2.6)	_	20.0

NOTES:

- (A) Bad debts written off during the year of \$1.8 million, \$1.2 million, and \$3.7 million for the years ended December 31, 2018, 2017, and 2016, respectively.
- (B) Reclassed \$3.0 million to contract liability as a result of ASC 606 adoption.
- (C) Reversals of valuation allowances due to the expiration of state and foreign net operating losses.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by SEC Rule 15d-15(b), we carried out an evaluation, under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to SEC Rule 13a-15 as of the end of the period covered by this report. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2018.

Management's Annual Report on Internal Control Over Financial Reporting and Attestation Report of Independent Registered Public Accounting Firm

The report of management on our internal control over financial reporting as of December 31, 2018 and the attestation report of our independent registered public accounting firm on our internal control over financial reporting are set forth in Part II, "Item 8. Financial Statements and Supplementary Data" in this report.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal controls over financial reporting that has materially affected or is reasonably likely to materially affect the Company's internal controls over financial reporting during the quarter ended December 31, 2018.

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE.

The information required by this item is incorporated by reference to our Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission (SEC) within 120 days of the fiscal year ended December 31, 2018.

Code of Ethics

Our Board of Directors has adopted a Code of Ethics and Business Conduct applicable to all officers, directors, and employees, which contains the ethical principles by which our chief executive officer, chief financial officer, and general counsel, among others, are expected to conduct themselves when carrying out their duties and responsibilities. A copy of our Code of Ethics may be found on our Investor Relations website under "Governance Documents" at http://www.ir.ryerson.com. Our website is not incorporated by reference into this Annual Report. We will provide a copy of our Code of Ethics to any person, without charge, upon request, by writing to the Compliance Officer, Ryerson Holding Corporation, 227 West Monroe Street, 27th Floor, Chicago, Illinois 60606 (telephone number (312) 292-5000). We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of our Code of Ethics and Business Conduct by posting such information on our website at http://www.ir.ryerson.com or by filing a Form 8-K with the SEC.

ITEM 11. EXECUTIVE COMPENSATION.

Information concerning compensation of our executive officers and directors for the year ended December 31, 2018, is presented under the captions "Executive Compensation," "Compensation Tables," and "Director Compensation" in our proxy statement. This information is incorporated herein by reference.

Information concerning compensation committee interlocks is presented under the caption "Compensation Committee—Compensation Committee Interlocks and Insider Participation" in our proxy statement and is incorporated herein by reference.

The report of our Compensation Committee can be found under the caption "Compensation Committee Report" in our proxy statement and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

Information concerning the security ownership of certain beneficial owners as of February 28, 2019, is set forth under the caption "Stock Ownership—Ownership of More Than 5% of Ryerson Stock" in our proxy statement and is incorporated herein by reference.

Information concerning the security ownership of our directors and executive officers as of February 28, 2019, is set forth under the caption "Stock Ownership—Directors and Executive Officers" in our proxy statement and is incorporated herein by reference.

Securities Authorized for Issuance under Equity Compensation Plans

Our stockholders have approved our 2014 Omnibus Incentive Plan, or 2014 Plan, which is the Company's only equity compensation plan.

Securities Authorized for Issuance under Equity Compensation Plans

The following table sets forth, as of December 31, 2018, information concerning equity compensation plans under which our securities are authorized for issuance. The table does not reflect grants, awards, exercises, terminations, or expirations since that date.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights (1) (a)	Weighted-average exercise price of outstanding options, warrants, and rights (2) (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column) (3)
Equity compensation plans approved by security holders	888,989	\$ —	399,506
Equity compensation plans not approved by security holders Total	 	<u> </u>	399,506

- (1) Includes (i) 618,930 shares of our common stock subject to performance units, which vest depending on continued employment or service and the level of attainment of certain performance metrics, and (ii) 270,059 shares of our common stock subject to restricted stock units, which vest depending on continued employment or service.
- (2) Not applicable because all outstanding awards reflected in column (a) will be issued upon the vesting of outstanding restricted stock units.
- (3) All of the shares of common stock that remained available for future issuance as of December 31, 2018, were available under the 2014 Plan. Subject to certain express limits of the 2014 Plan, shares available for award purposes under the 2014 Plan generally may be used for any type of award authorized under that plan including options, stock appreciation rights, restricted stock, restricted stock units, and other stock-based awards. The number of common shares reserved and available for delivery under the 2014 Plan is subject to adjustment.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

Information concerning the independence of our directors, certain relationships, and related transactions during 2018, and our policies with respect to such transactions is set forth under the captions "Board of Directors" and "Related Party Transactions" in our proxy statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Information concerning principal accountant fees and services is set forth under the captions "Items You May Vote On—Ratification of the Appointment of Independent Registered Public Accounting Firm," "Audit Committee—Audit, Audit-Related, and Other Non-Audit Services," and "Audit Committee—Pre-Approval Policies" in our proxy statement and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Financial Statements and Schedules

The following financial statements and schedules listed below are included in this Form 10-K:

Financial Statements (See Item 8)

Schedule I

Schedule II

All other schedules are omitted since the required information is not present or is not present in amounts sufficient to require submission of the schedules.

(b) Exhibits

EXHIBIT INDEX

Exhibit	Exhibit Incorporated by Reference				Filed
Number	Exhibit Description	Form	File No.	Filing Date	Herewith
2.1	Agreement and Plan of Merger, dated as of June 4, 2018, by and among Joseph T. Ryerson & Son, Inc., Hunter MergerCo, Inc., Central Steel and Wire Company, and Fortis Advisors LLC, a Delaware limited liability company, solely in its capacity as the Stockholder Representative thereunder.*	8-K	001-34735	June 5, 2018	
3.1	Form of Third Amended and Restated Certificate of Incorporation of Ryerson Holding Corporation.	S-1/A-22	333-164484	August 6, 2014	
3.2	Form of Amended and Restated Bylaws of Ryerson Holding Corporation.	S-1/A-15	333-164484	May 6, 2013	
4.1	Form of Common Stock Certificate of Ryerson Holding Corporation.	10-K	001-34735	March 9, 2016	
4.2	Indenture, dated as of May 24, 2016, by and among Joseph T. Ryerson & Son, Inc., as Issuer, the Guarantors party thereto, and Wells Fargo Bank, National Association, as the Trustee, relating to the Issuer's 11.00% Senior Secured Notes due 2022.	8-K	001-34735	May 24, 2016	
4.3	Form of Investor Rights Agreement, by and among Ryerson Holding Corporation, Platinum Equity Capital Partners, L.P., Platinum Equity Capital Partners-PF, L.P., Platinum Equity Capital Partners-A, L.P., Platinum Equity Capital Partners II, L.P., Platinum Equity Capital Partners-PF II, L.P., Platinum Equity Capital Partners-A II, L.P. and Platinum Rhombus Principals, LLC.	S-1/A-15	333-164484	May 6, 2013	
10.1	General Security Agreement, dated October 19, 2007, by and between Ryerson Canada, Inc. and Bank of America, N.A., as Canadian Agent.	S-4	333-152102	July 3, 2008	

10.2	Ryerson Nonqualified Savings Plan.	S-4/A-2	333-152102	February 24, 2009
10.3	Ryerson Holding Corporation Retention Bonus Plan.	S-1/A-19	333-164484	June 24, 2014
10.4	Ryerson Annual Incentive Plan (as amended through June 14, 2007).	S-1	333-164484	January 22, 2010
10.5	Ryerson Holding Corporation 2014 Omnibus Incentive Plan.	S-1/A-21	333-164484	July 24, 2014
10.6	Offer Letter Agreement, dated May 7, 2015, by and between Ryerson Holding Corporation and Edward J. Lehner.	8-K	001-34735	May 8, 2015
10.7	Confidentiality, Non-Competition and Non-Solicitation Agreement, dated June 1, 2015, by and between Ryerson Holding Corporation and Edward J. Lehner.	8-K	001-34735	June 5, 2015
10.8	Form of 2015 Restricted Stock Unit Agreement.	10-Q	001-34735	August 12, 2015
10.9	Form of 2015 Performance Unit Agreement.	10-Q	001-34735	August 12, 2015
10.10	Form of Director and Officer Indemnification Agreement.	S-1/A18	333-164484	March 27, 2014
10.11	Form of Participation Agreement for the Ryerson Holding Corporation Retention Bonus Plan.	S-1/A-19	333-164484	June 24, 2014
10.12	Employment Agreement, dated December 10, 2004, between Ryerson Tull, Inc. and Kevin D. Richardson, as amended.	10-Q	001-34735	May 7, 2015
10.13	Employment Agreement, dated January 3, 2005, between Ryerson Tull, Inc. and Michael Burbach, as amended.	10-Q	001-34735	May 7, 2015
10.14	<u>Directors Compensation Summary Sheet.</u>	10-K	001-34735	March 9, 2016
10.15	Intercreditor Agreement by and between Bank of America, N.A. as ABL Collateral Agent and Wells Fargo Bank, National Association, as Notes Collateral Agent Dated as of October 10, 2012.	10-K	001-34735	March 9, 2016
10.16	Amendment No. 1, dated as of March 11, 2015, to the Intercreditor Agreement dated as of October 10, 2012, by and between Bank of America, N.A. as ABL Collateral Agent and Wells Fargo Bank, National Association, as Notes Collateral Agent.	10-K	001-34735	March 9, 2016

10.17	Joinder Agreement dated as of July 24, 2015, to Intercreditor Agreement dated as of October 10, 2012 and amended as of March 11, 2015 by and between Bank of America, N.A. as ABL Collateral Agent and Wells Fargo Bank, National Association, as Notes Collateral Agent.	10-K	001-34735	March 9, 2016
10.18	Credit Agreement, dated as of July 24, 2015, among Ryerson Holding Corporation, Joseph T. Ryerson & Son, Inc., Sunbelt-Turret Steel, Inc., Turret Steel Industries, Inc., Imperial Trucking Company, LLC, Wilcox-Turret Cold Drawn, Inc., Fay Industries, Inc., Ryerson Procurement Corporation, Ryerson Canada, Inc., and each of the other borrowers and guarantors, the lenders party thereto from time to time, and Bank of America, N.A., as the administrative agent and collateral agent.	8-K	001-34735	July 29, 2015
10.19	Amendment No. 1, dated as of November 16, 2016, to the Credit Agreement, dated as of July 24, 2015, by and among Ryerson Holding Corporation, Joseph T. Ryerson & Son, Inc., Ryerson Canada, Inc., and each of the other borrowers and guarantors, the lenders party thereto from time to time, and Bank of America, N.A., as the administrative agent and collateral agent.	8-K	001-34735	November 17, 2016
10.20	Security Agreement, dated as of July 24, 2015, Ryerson Holding Corporation, Joseph T. Ryerson & Son, Inc. ("Ryerson"), and the domestic subsidiaries of Ryerson from time to time party thereto in their capacities as pledgors, assignors and debtors thereunder in favor of Bank of America, N.A., in its capacity as collateral agent, as pledgee, assignee and secured party for the benefit of the secured parties.	10-K	001-34735	March 9, 2016
10.21	Canadian Security Agreement dated as of July 24, 2015 between Ryerson Canada, Inc. and Bank of America, N.A., in its capacity as collateral agent.	8-K	001-34735	July 29, 2015
10.22	Canadian Security Agreement dated as of July 24, 2015 between Turret Steel Canada, ULC, and Bank of America, N.A., in its capacity as collateral agent.	8-K	001-34735	July 29, 2015
10.23	Employment Agreement, dated September 8, 2005, between Ryerson Tull, Inc. and Erich Schnaufer, as amended.	10-K	001-34735	March 9, 2016

10.24	Amendment No. 2, dated as of June 28, 2018 to Credit Agreement dated as of July 24, 2015, among Ryerson Holding Corporation, Joseph T. Ryerson & Son, Inc., Wilcox-Turret Cold Drawn, Inc., Ryerson Procurement Corporation, Southern Tool Steel, LLC, Ryerson Canada, Inc., and each of the other borrowers and guarantors, the lenders party thereto, and Bank of America, N.A., as the administrative agent and collateral agent.	8-K	001-34735	June 29, 2018	
21.1	List of Subsidiaries of Ryerson Holding Corporation.				X
23.1	Consent of Independent Registered Public Accounting Firm.				X
31.1	Certificate of the Principal Executive Officer of the Company, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certificate of the Principal Financial Officer of the Company, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1	Written Statement of Edward J. Lehner, President and Chief Executive Officer of the Company pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.**				X
32.2	Written Statement of Erich S. Schnaufer, Chief Financial Officer, of the Company pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.**				X
101.INS	XBRL Instance Document.				X
101.SCH	XBRL Taxonomy Extension Schema Document.				X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.				X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.				X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.				X

^{*} Schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. Ryerson agrees to furnish supplementally to the Securities and Exchange Commission a copy of any omitted schedule or exhibit upon request, subject to Ryerson's right to request confidential treatment of any requested schedule or exhibit.

^{**} Furnished herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, Ryerson Holding Corporation has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

RYERSON HOLDING CORPORATION

By: /s/ Erich S. Schnaufer

Erich S. Schnaufer

Chief Financial Officer (duly authorized signatory and principal financial officer of the registrant)

Date: March 5, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Edward J. Lehner Edward J. Lehner	President and Chief Executive Officer (Principal Executive Officer)	March 5, 2019
/s/ Erich S. Schnaufer Erich S. Schnaufer	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 5, 2019
/s/ Kirk K. Calhoun Kirk K. Calhoun	Director	March 5, 2019
/s/ Court D. Carruthers Court D. Carruthers	Director	March 5, 2019
/s/ Eva M. Kalawski Eva M. Kalawski	Director	March 5, 2019
/s/ Jacob Kotzubei Jacob Kotzubei	Director	March 5, 2019
/s/ Stephen P. Larson Stephen P. Larson	Director	March 5, 2019
/s/ Philip E. Norment Philip E. Norment	Director	March 5, 2019
/s/ Mary Ann Sigler Mary Ann Sigler	Director	March 5, 2019

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Section 2: EX-21.1 (EX-21.1)

Exhibit 21.1

SIGNIFICANT SUBSIDIARIES OF RYERSON HOLDING CORPORATION

Ryerson Holding Corporation, a Delaware corporation, owns, directly or indirectly, the following significant subsidiaries:

Name of Subsidiary	State or Jurisdiction of Incorporation or Organization
Joseph T. Ryerson & Son, Inc.	Delaware
Ryerson Procurement Corporation	Delaware
Ryerson Canada, Inc.	Canada

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Section 3: EX-23.1 (EX-23.1)

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements: Registration Statement (Form S-8 No. 333-202816) pertaining to the Omnibus Incentive Plan of Ryerson Holding Corporation, Registration Statement (Form S-3 No. 333-211966) of Ryerson Holding Corporation, and Registration Statement (Form S-3 No. 333-215381) of Ryerson Holding Corporation; of our reports dated March 5, 2019, with respect to the consolidated financial statements and schedules of Ryerson Holding Corporation and the effectiveness of internal control over financial reporting of Ryerson Holding Corporation, included in this Annual Report (Form 10-K) of Ryerson Holding Corporation for the year ended December 31, 2018.

/s/ Ernst & Young LLP

Chicago, Illinois March 5, 2019

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Section 4: EX-31.1 (EX-31.1)

Exhibit 31.1

CERTIFICATE OF THE PRINCIPAL EXECUTIVE OFFICER

- I, Edward J. Lehner, President & Chief Executive Officer, certify that:
 - 1. I have reviewed this Annual Report on Form 10-K of Ryerson Holding Corporation;
 - 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
 - 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
 - 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act rules 13a-15 (f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is

reasonably likely to materially affect, the registrant's internal control over financial reporting; and

- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 5, 2019

Signature: /s/ Edward J. Lehner

Edward J. Lehner

President & Chief Executive Officer

(Principal Executive Officer)

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Section 5: EX-31.2 (EX-31.2)

Exhibit 31.2

CERTIFICATE OF THE PRINCIPAL FINANCIAL OFFICER

- I, Erich S. Schnaufer, as Chief Financial Officer, certify that:
 - 1. I have reviewed this Annual Report on Form 10-K of Ryerson Holding Corporation;
 - 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
 - 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
 - 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act rules 13a-15 (f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
 - 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 5, 20	019
Signature:	/s/ Erich S. Schnaufer
	Erich S. Schnaufer
	Chief Financial Officer

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Section 6: EX-32.1 (EX-32.1)

Exhibit 32.1

CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Ryerson Holding Corporation (the "Company") on Form 10-K for the period ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Edward J. Lehner, the President and Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

/s/ Edward J. Lehner
Edward J. Lehner
President & Chief Executive Officer
(Principal Executive Officer)

March 5, 2019

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Section 7: EX-32.2 (EX-32.2)

Exhibit 32.2

CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Ryerson Holding Corporation (the "Company") on Form 10-K for the period ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Erich S. Schnaufer, the Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Signature: /s/ Erich S. Schnaufer
Erich S. Schnaufer
Chief Financial Officer
(Principal Financial Officer)

March 5, 2019

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