Annual Financial Statements

As of January 1, 2023 and January 2, 2022, and

for the years ended January 1, 2023, January 2, 2022

and January 3, 2021

SMITHFIELD FOODS, INC. AND SUBSIDIARIES
TABLE OF CONTENTS

	PAGE

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Report of Independent Auditors

The Board of Directors of Smithfield Foods, Inc.

Opinion

We have audited the consolidated financial statements of Smithfield Foods, Inc. and subsidiaries (the Company), which comprise the consolidated balance sheets as of January 1, 2023 and January 2, 2022, and the related consolidated statements of income, comprehensive income, changes in shareholder's equity and cash flows for each of the three years in the period ended January 1, 2023, and the related notes (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company at January 1, 2023 and January 2, 2022, and the results of its operations and its cash flows for each of the three years in the period ended January 1, 2023 in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not

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a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Ernst + Young LLP

March 29, 2023

SMITHFIELD FOODS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(in millions)

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
Sales	$ 19,071	$ 17,637	$ 16,060
Cost of sales	17,143	15,804	14,519
Gross profit	1,928	1,833	1,541
Selling, general and administrative expenses	928	853	937
(Income) loss from equity method investments	6	(28)	(11)
Other (income) expense	(225)	342	104
Operating profit	1,219	666	512
Interest expense	96	92	92
Non-operating (gains) losses	(16)	(27)	6
Income before income taxes	1,139	601	414
Income tax expense	258	127	31
Net income	881	474	383
Net income attributable to noncontrolling interests	11	1	1
Net income attributable to Smithfield	$ 870	$ 472	$ 381

See Notes to Consolidated Financial Statements

SMITHFIELD FOODS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
Net income	$ 881	$ 474	$ 383
Other comprehensive income (loss), net of tax:			
Foreign currency translation	(59)	(96)	41
Pension accounting	44	136	(91)
Hedge accounting	(27)	(29)	34
Total other comprehensive income (loss)	(41)	11	(16)
Comprehensive income	839	485	367
Comprehensive income (loss) attributable to noncontrolling interest	22	(3)	1
Comprehensive income attributable to Smithfield	$ 818	$ 488	$ 366

See Notes to Consolidated Financial Statements

SMITHFIELD FOODS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions, except share data)

	January 1, 2023	January 2, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	$ 568	$ 323
Accounts receivable, net	1,186	1,075
Inventories	3,425	3,114
Prepaid expenses and other current assets	363	232
Total current assets	5,543	4,745
Property, plant and equipment, net	4,139	4,354
Goodwill	1,822	1,884
Intangible assets, net	1,387	1,400
Operating lease assets, net	430	402
Equity method investments	224	199
Other assets	303	342
Total assets	$ 13,847	$ 13,326
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	1,208	1,029
Current portion of long-term debt and finance lease obligations	96	152
Current portion of operating lease obligations	74	98
Accrued expenses and other current liabilities	1,210	1,293
Total current liabilities	2,589	2,572
Long-term debt and finance lease obligations	2,177	2,019
Long-term operating lease obligations	368	311
Deferred income taxes, net	609	588
Net long-term pension obligation	276	360
Other liabilities	257	248
Redeemable noncontrolling interests	197	174
Commitments and contingencies		
Equity:		
Shareholder's equity:		
Common stock, no par value, 1,000 shares authorized; 1,000 issued and outstanding		
Additional paid-in capital	4,188	4,190
Retained earnings	3,894	3,521
Accumulated other comprehensive loss	(708)	(656)
Total shareholder's equity	7,374	7,054
Noncontrolling interests	—	—
Total equity	7,374	7,054
Total liabilities and equity	$ 13,847	$ 13,326

See Notes to Consolidated Financial Statements

SMITHFIELD FOODS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
Cash flows from operating activities:			
Net income	$ 881	$ 474	$ 383
Adjustments to reconcile net income to net cash flows from operating activities:			
Depreciation and amortization	512	406	387
Impairment of assets	40	1	25
(Income) loss from equity method investments	6	(28)	(11)
Pension expense	(6)	31	101
Deferred income taxes	3	38	(64)
Gain on contribution to joint venture	—	—	(42)
Gain on sale/dilution of equity method investments	(56)	—	—
(Gain) loss on sale of businesses	(414)	—	1
Pension contributions	(22)	(20)	(214)
Changes in operating assets and liabilities and other, net:			
Accounts receivable	(152)	(54)	186
Inventories	(417)	(220)	74
Prepaid expenses and other current assets	(22)	(3)	(13)
Accounts payable	164	235	(108)
Accrued expenses and other current liabilities	(23)	68	229
Other	24	(141)	99
Net cash flows from operating activities	517	786	1,033
Cash flows from investing activities:			
Business dispositions	606	—	—
Proceeds from the sale of investments	21	—	—
Proceeds from sale of property, plant and equipment and other assets	10	9	17
Business acquisitions, net of cash acquired	—	(57)	(71)
Net expenditures from breeding stock transactions	(4)	(8)	(70)
Investments in partnerships and other assets	(22)	—	(1)
Capital expenditures	(421)	(286)	(400)
Other	3	12	21
Net cash flows from investing activities	193	(330)	(503)
Cash flows from financing activities:			
Repayments of Securitization Facility	(785)	(430)	(465)
Proceeds from Securitization Facility	785	430	465
Payment of dividends	(496)	(192)	(97)
Payment of deferred purchase consideration for acquisition of GCM	(55)	—	—
Principal payments on long-term debt and finance lease obligations	(6)	(664)	(516)
Proceeds from the issuance of debt	—	493	819
Debt issuance costs	—	(10)	(5)
Net repayments of commercial paper	—	—	(125)
Net proceeds from (repayments of) revolving credit facilities	79	39	(449)
Other	—	(3)	(20)
Net cash flows from financing activities	(477)	(336)	(393)
Effect of foreign exchange rate changes on cash	12	(3)	4
Net change in cash, cash equivalents and restricted cash	245	117	141
Cash, cash equivalents and restricted cash at beginning of period	325	208	67
Cash, cash equivalents and restricted cash at end of period	$ 570	$ 325	$ 208

See Notes to Consolidated Financial Statements

SMITHFIELD FOODS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY
(in millions)

	Additional Paid-in Capital	Retained Earnings	Accumulated other comprehensive loss	Total Shareholder's Equity	Noncontrolling Interests	Total Equity
Balance, December 29, 2019	$ 4,190	$ 2,956	$ (651)	$ 6,495	$ 1	$ 6,496
Dividends	—	(216)	—	(216)	—	(216)
Comprehensive income:						
Net income	—	381	—	381	—	381
Other comprehensive loss, net of tax	—	—	(16)	(16)	—	(16)
Balance, January 3, 2021	4,190	3,122	(667)	6,644	1	6,645
Dividends	—	(73)	—	(73)	—	(73)
Comprehensive income:						
Net income	—	472	—	472	—	472
Other comprehensive income, net of tax	—	—	10	10	—	10
Effect of change in accounting principle	—	(1)	1	—	—	—
Balance, January 2, 2022	4,190	3,521	(656)	7,054	—	7,054
Dividends	—	(496)	—	(496)	—	(496)
Adjustment to redeemable noncontrolling interests	(2)	—	—	(2)	—	(2)
Comprehensive income:						
Net income	—	870	—	870	—	870
Other comprehensive loss, net of tax	—	—	(52)	(52)	—	(52)
Balance, January 1, 2023	$ 4,188	$ 3,894	$ (708)	$ 7,374	$ —	$ 7,374

See Notes to Consolidated Financial Statements

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization

Smithfield Foods, Inc., together with its subsidiaries ("Smithfield," "the Company," "we," "us" or "our"), is the largest hog producer in the United States (U.S.) and largest pork processor in the world. We produce and market a wide variety of fresh meat and packaged meats products both domestically and internationally. Our principal operations are located in the U.S., Europe and Mexico. We operate in a cyclical industry and our results are significantly affected by fluctuations in commodity prices for meat, livestock (primarily hogs) and grains. Smithfield is an indirect wholly-owned subsidiary of Hong Kong-based WH Group Limited (WH Group). WH Group is publicly traded on the Stock Exchange of Hong Kong Limited.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP), which requires us to make estimates and use assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. It is possible that actual results could differ materially from those estimates. The information reflects all normal recurring adjustments which we believe are necessary to present fairly the financial position and results of operations for all periods included. Certain prior year amounts have been reclassified to conform to current year presentation. Totals and percentages may be affected by rounding.

Our elected fiscal year is the 52-week or 53-week period which ends on the Sunday nearest to December 31. Unless otherwise noted, all references to "2022", "2021" and "2020" are to the 52-week periods ended January 1, 2023 and January 2, 2022, and the 53-week period ended January 3, 2021, respectively.

Principles of Consolidation

The consolidated financial statements include the accounts of all wholly-owned subsidiaries, as well as all majority-owned subsidiaries and other entities for which we have a controlling interest. All intercompany transactions and accounts have been eliminated. Consolidating the results of operations and financial position of variable interest entities for which we are the primary beneficiary does not have a material effect on sales, net income, or on our financial position for the fiscal periods presented.

Foreign currency denominated assets and liabilities are translated into U.S. dollars using the exchange rates in effect at the balance sheet dates. Income and cash flows in foreign currencies are translated into U.S. dollars using the average exchange rates over the course of the year. The effect of exchange rate fluctuations on the translation of assets and liabilities is included as a component of shareholder's equity in accumulated other comprehensive loss and included in other comprehensive income (loss) for each period. Gains and losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency are recognized in earnings as incurred and included in other (income) expense for operating transactions, and non-operating (gains) losses for non-operating transactions.

Cash and Cash Equivalents

We consider all highly liquid investments with original maturities of 90 days or less to be cash equivalents. The majority of our cash is concentrated in demand deposit accounts or money market funds. The carrying value of cash equivalents approximates market value.

Accounts Receivable

Accounts receivable is comprised of both receivables from contracts with customers and other receivables. Accounts receivable are recorded net of the allowance for doubtful accounts. We regularly evaluate the collectibility of our accounts receivable based on a variety of factors, including the length of time the receivables are past due, the financial health of the customer and historical experience. Based on our evaluation, we record reserves to reduce the related receivables to amounts we reasonably believe are collectible. Our reserve for uncollectible accounts receivable was $11 million and $14 million as of January 1, 2023 and January 2, 2022, respectively.

Inventories

Inventories consist of the following:

	January 1, 2023	January 2, 2022
	(in millions)	
Livestock	$ 1,426	$ 1,325
Fresh and packaged meats	1,234	1,089
Grains	460	461
Manufacturing supplies	155	139
Other	150	101
Total inventories	$ 3,425	$ 3,114

Inventories are generally valued at the lower of historical average cost or net realizable value. The cost of livestock includes feed, medications, contract grower fees and other production expenses. Fresh pork in the U.S. is valued based on U.S. Department of Agriculture (USDA) published market prices and adjusted for the cost of further processing. Costs for fresh and packaged meats include meat, labor, supplies and overhead. Manufacturing supplies principally consist of ingredients and packaging materials. Other consists primarily of maintenance parts.

Derivative Financial Instruments and Hedging Activities

See Note 5: Derivative Financial Instruments for our policy.

Property, Plant and Equipment, Net

Property, plant and equipment (PP&E) is generally stated at historical cost and depreciated on a straight-line basis over the estimated useful lives of the assets. Assets held under finance leases are classified in property, plant and equipment, net and depreciated over the lease term or, in the instance where title transfers to us at the end of the lease term, the estimated useful lives of the assets. The depreciation of assets held under finance leases is included in depreciation expense. Depreciation expense is included in either cost of sales, selling, general and administrative expenses (SG&A) or other (income) expense, as appropriate. Depreciation expense totaled $496 million, $395 million and $367 million in 2022, 2021 and 2020, respectively.

During the construction period of significant assets, the associated interest costs are capitalized. Capitalized interest totaled $1 million, $1 million and $2 million for 2022, 2021 and 2020, respectively.

Property, plant and equipment, net, consists of the following:

	Useful Life	January 1, 2023	January 2, 2022
	(in Years)	(in millions)	
Land and improvements	15+	$ 736	$ 759
Buildings and improvements	10-40	1,825	1,911
Machinery and equipment	5-25	3,055	2,955
Breeding stock	2	241	229
Computer hardware and software	3-15	273	275
Vehicles	3-10	121	108
Construction in progress		359	215
Property, plant and equipment, gross		6,610	6,451
Accumulated depreciation		(2,526)	(2,135)
Property, plant and equipment, net		4,084	4,317
Finance leases		55	37
Total property, plant and equipment, net		$ 4,139	$ 4,354

Goodwill and Other Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of identifiable net assets of businesses acquired. The following table shows the change in the carrying amount of goodwill for the periods noted:

	Total
	(in millions)
Balance, January 3, 2021	$ 1,826
Acquisitions	78
Foreign currency translation	(20)
Balance, January 2, 2022	1,884
Dispositions	(47)
Measurement period adjustments	(4)
Foreign currency translation	(12)
Balance, January 1, 2023	$ 1,822

Intangible assets consist of the following:

	Useful Life	January 1, 2023	January 2, 2022
	(in Years)	(in millions)	
Amortized intangible assets:			
Customer relationships	14-20	$ 86	$ 86
Contractual relationships	17-22	40	40
Rights and customer lists	5-25	6	6
Accumulated amortization		(64)	(56)
Amortized intangible assets, net		68	76
Non-amortized intangible assets:			
Trademarks	Indefinite	1,320	1,325
Intangible assets, net		$ 1,387	$ 1,400

Goodwill and indefinite-lived intangible assets are tested for impairment annually in the fourth quarter, or sooner if impairment indicators arise. In the evaluation of goodwill for impairment, we may perform a qualitative assessment to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If it is not, no further analysis is required. If it is, a quantitative goodwill impairment test is performed to measure the amount of goodwill impairment loss to be recognized for that reporting unit, if any.

To identify if an impairment exists, we compare the fair value of a reporting unit with its carrying amount, including goodwill. The fair value of a reporting unit is estimated by applying valuation multiples and/or estimating future discounted cash flows. The selection of multiples is dependent upon assumptions regarding future levels of operating performance as well as business trends and prospects, and industry, market and economic conditions. When estimating future discounted cash flows, we consider the assumptions that hypothetical marketplace participants would use in estimating future cash flows. In addition, where applicable, an appropriate discount rate is used, based on an industry-wide average cost of capital or location-specific economic factors. We consider all these factors to be level 3 inputs, as defined in Note 12: Fair Value Measurements. If the fair value of a reporting unit exceeds its carrying amount, goodwill is not impaired. However, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized in an amount equal to that excess.

Based on the results of our annual goodwill impairment tests, as of our testing date, we have determined that no impairments existed for any of the periods presented.

The fair values of trademarks are calculated using a royalty rate method. Assumptions about royalty rates are based on the rates at which similar brands and trademarks are licensed in the marketplace. If the carrying value of a trademark exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. We recorded impairments on certain trademarks in other (income) expense of $2 million in 2020.

Intangible assets with finite lives are amortized over their estimated useful lives. The useful life of an intangible asset is the period over which the asset is expected to contribute directly or indirectly to future cash flows. Amortization expense for intangible assets was $8 million, $8 million and $7 million in 2022, 2021 and 2020, respectively. Intangible assets with finite lives are reviewed for recoverability when indicators of impairment are present using estimated future undiscounted cash flows related to those assets.

Estimated amortization expense associated with our intangible assets for each of the next five years are as follows:

Year	(in millions)
2023	$ 8
2024	8
2025	8
2026	8
2027	7

Investments

We account for investments in entities that we do not control, but have the ability to exercise significant influence, using the equity accounting method. We record our share of earnings and losses from our equity method investments in (income) loss from equity method investments in the consolidated statements of income. Some of these results are reported on a one-month lag, which does not materially impact our consolidated financial statements.

We account for investments in entities that we do not control and do not have the ability to exercise significant influence at fair value if fair value is readily determinable. For investments that do not have readily determinable fair values, we account for the investment at cost minus impairment, if any, plus or minus changes resulting from orderly transactions for the identical or a similar investment of the same issuer.

We consider whether the fair value of any of our investments has declined below its carrying value whenever adverse events or changes in circumstances indicate that recorded values may not be recoverable. If we consider any such decline to be other than temporary (based on various factors, including historical financial results, product development activities and the overall health of the affiliate’s industry), then a write-down of the investment would be recorded to its estimated fair value.

Leases

At inception, we determine whether a contract is or contains a lease and determine the lease's classification between finance and operating based on the contractual terms. Our lease assets and obligations are initially measured at the present value of the future lease payments over the term of the lease, adjusted for any prepayments. The lease term consists of the noncancellable period of the lease, plus any period covered by an option to extend the lease that is either controlled by the lessor or is reasonably certain to be exercised by the Company. The value of the future lease payments is discounted at the interest rate implicit in our lease contracts, if readily determinable. Otherwise, we utilize the appropriate incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term and economic environment to that of the lease. Our lease assets and obligations do not contain any leases with a term of 12 months or less. Finance lease assets are classified in property, plant and equipment, net.

Our lease agreements contain both lease and non-lease components. We allocate the consideration in our lease agreements to each component based on the standalone values of each component. The non-lease components are excluded from the measurement of our lease assets and obligations.

Operating lease cost is recognized on a straight-line basis in earnings over the term of the lease. Finance lease cost is amortized into earnings using the effective interest method over the lease term or, in the instance where title transfers to us at the end of the lease term, the estimated useful lives of the assets. The interest component of finance lease cost is included in interest expense.

Debt Issuance Costs, Premiums and Discounts

Debt issuance costs, premiums and discounts are amortized into interest expense over the terms of the related loan agreements using the effective interest method. Debt issuance costs are generally recorded as a reduction of the associated debt instrument and classified in long-term debt and finance lease obligations in the consolidated balance sheets. Costs to enter into and/or refinance credit facilities are classified in other assets on the consolidated balance sheets and reclassified to current assets as the credit facilities approach expiration.

Income Taxes

Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rate is recognized in earnings in the period that includes the enactment date. Valuation allowances are established when necessary to reduce deferred tax assets to amounts more likely than not to be realized.

The determination of our provision for income taxes requires significant judgment, the use of estimates, and the interpretation and application of complex tax laws. Significant judgment is required in assessing the timing and amounts of deductible and taxable items.

We record liabilities for unrecognized tax benefits associated with known or anticipated tax issues based on our analysis of whether, and the extent to which, additional taxes will be due. We accrue interest and penalties related to unrecognized tax benefits in accrued expenses and other current liabilities or other liabilities, as appropriate, and recognize the related expense in income tax expense.

We account for the global intangible low-taxed income (GILTI) inclusion from foreign subsidiaries in the period in which it is incurred.

Pension Accounting

We recognize the funded status of our defined benefit pension plans in the consolidated balance sheets. We measure our pension and other postretirement benefit plan obligations and related plan assets as of December 31. The measurement of our pension obligations and related costs is dependent on the use of assumptions and estimates. These assumptions include discount rates, salary growth, mortality rates and expected returns on plan assets. Changes in assumptions and future investment returns could potentially have a material impact on our expenses and related funding requirements.

We recognize in other comprehensive income (loss), the net of tax results of the gains or losses and prior service costs or credits that arise during the period but are not recognized in net periodic benefit cost. Prior to the freeze of our qualified pension plans for all non-union participants in the second quarter of 2021, these amounts were amortized into net periodic benefit cost over the average remaining service period of active plan participants. Subsequent to the plan freeze, these amount are amortized over the average remaining life expectancy of the plan participants.

Self-Insurance Programs

We are self-insured for certain levels of workers' compensation, health care coverage, product recall, vehicle, property, and general liability. The cost of these self-insurance programs is accrued based upon estimated settlements for known and anticipated claims. Any resulting adjustments to previously recorded reserves are reflected in current period earnings.

Asset Retirement Obligations

We record asset retirement obligations (ARO) related to PP&E when a legal obligation is incurred and the fair value of the obligation can be estimated. AROs are initially recorded as a liability at fair value and capitalized in property, plant and equipment, net on the consolidated balance sheet. We estimate the fair value of AROs based on the projected discounted future cash outflows required to settle the liability. Such an estimate requires assumptions and judgments regarding the amount and timing of cash outflows required to settle the liability, which are level 3 inputs, as defined in Note 12: Fair Value Measurements. If the fair value of the recorded ARO changes, a revision is recorded to both the ARO and the related asset. The cost of the ARO is depreciated into earnings on a straight-line basis over the remaining useful life of the related asset. Accretion of the liability due to the passage of time is recognized as an expense in current period earnings.

Contingent Liabilities

We are subject to lawsuits, investigations and other claims related to the operation of our farms, labor, livestock procurement, securities, environmental, product, taxing authorities and other matters, and are required to assess the likelihood of any adverse judgments or outcomes to these matters, as well as potential ranges of probable losses and fees.

A determination of the amount of accruals and disclosures required, if any, for these contingencies is made after considerable analysis of each individual issue. We accrue for contingent liabilities, including future defense costs, when an assessment of the risk of loss is probable and can be reasonably estimated. We disclose contingent liabilities when the risk of material loss is at least reasonably possible.

Our contingent liabilities contain uncertainties because the eventual outcome will result from future events. Our determination of accruals and any reasonably possible losses in excess of those accruals require estimates and judgments related to future changes in facts and circumstances, interpretations of the law, the amount of damages or fees, and the effectiveness of strategies or other factors beyond our control. If actual results are not consistent with our estimates or assumptions, we may be exposed to gains or losses that could be material.

Redeemable Noncontrolling Interests

Certain noncontrolling interest holders have the right to exercise a put option that would obligate us to redeem a portion or all of their interest. These noncontrolling interests are classified as redeemable noncontrolling interests outside of equity in our consolidated balance sheets. At the end of each period we adjust the value of redeemable noncontrolling interests, if necessary, to the higher of their carrying value or redemption value (as defined in the subsidiary's operating agreement) through additional paid-in capital.

The redemption value for the noncontrolling interest in Granjas Carroll de Mexico, S. de R.L. de C.V. (GCM) is fair value. We estimate the redemption value of GCM using an income and a market approach, which use significant assumptions, including projected revenue growth and profitability, capital spending, depreciation, taxes, foreign currency exchange rates, and a discount rate. We consider all these factors to be level 3 inputs, as defined in Note 12: Fair Value Measurements.

Revenue Recognition

Our revenue is primarily derived from contracts with customers for the purchase of our products. Revenue is recognized at a point in time when our performance obligation has been satisfied and control of the promised goods is transferred to the customer, which generally occurs upon shipment or delivery to a customer based on terms of the sale. The primary performance obligation in our contracts with customers is to provide meat products. Shipping and handling activities are considered part of the fulfillment of our promise to provide meat products and not a separate performance obligation. Shipping and handling costs are reported as a component of cost of sales.

Revenue is recorded at the transaction price, which is the amount of consideration we expect to receive in exchange for providing goods to customers. The transaction price may be adjusted for estimates of known or expected variable consideration, including consumer incentives, trade promotions, and other programs. Our estimates of variable consideration are based on a number of factors including history with the respective customer, current performance, and future projections. Additionally, in determining whether an estimate of variable consideration is constrained, we consider the likelihood and magnitude of a potential revenue reversal. We review and update these estimates regularly until the incentives or product returns are realized. The impact of any adjustment is recognized in the period in which the adjustment is identified. Payment terms vary per contract. However, payment is typically received within a few weeks of the invoice date.

Opening and closing balances of receivables from contracts with customers and deferred revenue for 2022 and 2021 are as follows:

	January 1, 2023	January 2, 2022	January 3, 2021
		(in millions)	
Receivables from contracts with customers	$ 1,037	$ 983	$ 923
Deferred revenue	14	24	13

Advertising and Promotional Costs

Advertising and promotional costs are expensed as incurred except for certain production costs, which are expensed upon the first airing of the advertisement. Promotional sponsorship costs are expensed as the promotional events occur. Advertising costs totaled $147 million, $134 million and $106 million in 2022, 2021 and 2020, respectively, and are included in SG&A.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs totaled $157 million, $157 million and $134 million in 2022, 2021 and 2020, respectively.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have a material current effect, or that are reasonably likely to have a material future effect, on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

NOTE 2: ACQUISITIONS AND DISPOSALS

Acquisitions

GCM

On July 7, 2021, we acquired a controlling interest in GCM in exchange for cash and other consideration valued at $108 million, increasing our total ownership in GCM from 50% to 66%. We paid $1 million, net of $17 million in cash acquired, of the purchase consideration to our joint venture partner upon change in control. We paid an additional $55 million in the third quarter of 2022 with smaller amounts payable annually through 2028. GCM consists of hog production and pork processing operations in Mexico, growing approximately 1.7 million hogs and processing approximately 1 million hogs per year, with approximately 2,800 employees. We historically recorded our share of earnings in GCM using the equity method of accounting. Upon acquisition of the controlling interest, the accounts of GCM were consolidated.

Mecom

On June 17, 2021, we acquired MECOM GROUP s.r.o., Schneider Food, s.r.o., and Kaiser Food kft. (collectively referred to as "Mecom") for €48 million ($57 million), inclusive of a post-closing adjustment. At closing, we paid $53 million for the acquisition, net of $1 million in cash acquired. A post-closing adjustment of $3 million was paid in the fourth quarter of 2021 and purchase accounting was finalized in the second quarter of 2022. Mecom has two meat processing plants in Slovakia and two in Hungary which produce salami and other packaged meats products. Mecom employs more than 1,400 people. The acquisition of Mecom expands our packaged meats business and footprint in Central Europe.

Disposals

Saratoga

On October 31, 2022 we closed on the sale of our Saratoga Specialty Foods operation (Saratoga), which produces spices, seasonings and marinades for sale to the foodservice industry and use in our internal production of various packaged meats products. Proceeds totaled $575 million, resulting in a $417 million gain on the disposal, which was recognized in other (income) expense in the consolidated statement of income in the fourth quarter of 2022. We received $568 million of proceeds at closing. The remainder was received in the first quarter of 2023. The carrying amount of assets disposed of included $47 million of allocated goodwill. The sale allows us to focus more on our core protein business.

NOTE 3: OTHER (INCOME) EXPENSE AND NON-OPERATING (GAINS) LOSSES

The following table provides details of other (income) expense and non-operating (gains) losses.

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
		(in millions)	
Other (income) expense:			
Gain on the sale of Saratoga [1]	$ (417)	$ —	$ —
(Gain) loss on foreign currency transactions	(6)	2	(3)
Gain on contribution to joint venture [2]	—	—	(42)
Impairments	—	1	25
Business interruption expenses	—	6	1
Contingencies [3]	21	319	80
Employee termination benefits [4]	38	8	24
Exit and disposal costs [4]	43	—	—
Accelerated depreciation and amortization [4]	98	12	20
Other	(2)	(7)	(1)
Total other (income) expense	$ (225)	$ 342	$ 104
Non-operating (gains) losses:			
Gain on the sale/dilution of equity method investments [5]	$ (56)	$ —	$ —
Net pension and postretirement benefits cost (benefit) [6]	(28)	(22)	17
Loss on debt extinguishment	—	3	3
Loss on foreign currency transactions	1	9	4
(Gain) loss on nonqualified retirement plan assets	26	(18)	(17)
Impairment of investment [5]	40	—	—
Other	1	1	—
Total non-operating (gains) losses	$ (16)	$ (27)	$ 6

(1) See Note 2: Acquisitions and Disposals for further information about our gain on sale of Saratoga assets.

(2) In 2020, Smithfield contributed certain biogas operations to our joint venture, Align RNG, LLC (Align). Our joint venture partner agreed to contribute $80 million in cash to fund additional biogas projects. As a result, we recorded a gain on the contribution of our Utah biogas operations of $42 million, which represents the difference between the fair value of the equity interests received from Align and the net book value of the assets contributed.

(3) See Note 14: Regulation and Contingencies for further information.

(4) In the second quarter of 2022 we initiated a plan to restructure our operations in the Western U.S. See Note 4: Restructuring for further information.

(5) See Note 6: Investments for further information.

(6) Net pension and postretirement benefits cost (benefit) includes the components of net pension and postretirement benefits cost other than service cost, which is included in operating profit. These components consist of interest cost, expected return on plan assets, amortization of actuarial gains/losses and prior service costs/credits, and curtailment gains. In the second quarter of 2021, we amended our qualified pension plans to freeze the benefit accrual for all non-union participants as of June 30, 2021. For more information, refer to Note 10: Pension and other retirement plans.

NOTE 4: RESTRUCTURING

In May 2022, we announced a decision to close our Vernon, California harvest and processing facility, exit farm operations in Arizona and California, and reduce our sow herd in Utah. The decision to permanently close our Vernon facility is based on increasingly difficult business conditions in California, where high taxes, high utility costs and a challenging regulatory environment negatively impact our ability to operate efficiently and profitably.

As a result of this decision, we incurred various exit costs and disposal charges, which have been, or will be, recorded in other (income) expense in our consolidated statements of income. The following table details the charges related to the restructuring that were recognized in 2022:

	Twelve Months Ended January 1, 2023
	(in millions)
Accelerated depreciation	$ 83
Employee termination benefits	28
Inventory write-downs	15
Contract termination costs	6
Loss on sale of farms	3
Other	16
Total	$ 151

As of January 1, 2023, the liability associated with these exit costs was $33 million. We made payments totaling $1 million associated with this liability. We estimate an additional $37 million in other exit costs will be incurred in 2023. The Vernon facility ceased operation in the first quarter of 2023.

In December 2022, we closed on the sale of our Arizona and California farms. We received $32 million in proceeds at closing and recognized a receivable of $2 million. The balance was received in the first quarter of 2023. Based on the total proceeds, we recognized a $3 million loss on disposal in other (income) expense in the consolidated statement of income in the fourth quarter of 2022.

The carrying amount of certain property, plant and equipment, together with associated liabilities, totaling $119 million is held for sale as a result of the restructuring and has been reclassified to prepaid expenses and other current assets in our consolidated balance sheet as of January 1, 2023. We expect the sale of these assets to be completed by the middle of 2023.

In 2022, we recorded $20 million of AROs for the estimated costs to close certain Company-owned farms in connection with the restructuring and in accordance with our general permit for concentrated animal feeding operations in the state of Utah. The cost of these AROs was recognized in other (income) expense in our consolidated statements of income in 2022 and included in accelerated depreciation in the table above.

NOTE 5: DERIVATIVE FINANCIAL INSTRUMENTS

Our pork production operations use various raw materials, primarily live hogs, corn and soybean meal, which are actively traded on commodity exchanges. We also use fuel and other energy commodities in our operations. We hedge these commodities when we determine conditions are appropriate to mitigate price risk. While this hedging may limit our ability to participate in gains from favorable commodity fluctuations, it also tends to reduce the risk of loss from adverse changes in raw material prices. We attempt to closely match the commodity contract terms with the hedged item. We also periodically enter into interest rate swaps to hedge exposure to changes in interest rates on certain financial instruments and foreign exchange forward contracts to hedge certain exposures to fluctuating foreign currency rates.

We record all derivatives as either assets or liabilities at fair value in the balance sheet, with the exception of normal purchase and normal sale contracts that are expected to result in physical delivery. Accounting for changes in the fair value of a derivative depends on whether it qualifies and has been designated as part of a hedging relationship. For derivatives that qualify and have been designated as hedging instruments for accounting purposes, changes in fair value have no net impact on earnings, to the extent the derivative is considered perfectly effective in achieving offsetting changes in fair value attributable to the risk being hedged, until the hedged item is recognized in earnings (commonly referred to as the "hedge accounting" method). For cash flow hedges, the entire change in fair value is recorded on the balance sheet until the hedged item is recognized in earnings. For derivatives that do not qualify or are not designated as hedging instruments for accounting purposes, changes in fair value are recorded in current period earnings (commonly referred to as the "mark-to-market" method). We may elect either method of accounting for our derivative portfolio, assuming all the necessary requirements are met. We have, in the past, availed ourselves of either acceptable method and expect to do so in the future. We believe all of our derivative instruments represent economic hedges against changes in prices and rates, regardless of their designation for accounting purposes.

Changes in commodity prices could have a significant impact on cash deposit requirements under our broker and counterparty agreements. Additionally, certain of our derivative contracts contain credit risk-related contingent features, which would require us to post additional cash collateral to cover net losses on open derivative instruments if our credit rating were downgraded. As of January 1, 2023, the net liability position of our open derivative instruments that are subject to credit risk-related contingent features was $3 million and we were not required to post any collateral to cover losses associated with this net liability position regardless of changes in our credit rating as the position was below the minimum margin threshold.

We are exposed to losses in the event of nonperformance or nonpayment by counterparties under financial instruments. Although our counterparties primarily consist of financial institutions that are investment grade, there is still a possibility that one or more of these companies could default. However, a portion of our financial instruments are exchange traded derivative contracts held with brokers and counterparties with whom we maintain margin accounts that are settled on a daily basis, thereby limiting our credit exposure to non-exchange traded derivatives. Determination of the credit quality of our counterparties is based upon a number of factors, including credit ratings and our evaluation of their financial condition. As of January 1, 2023, we had gross credit exposure of $34 million on non-exchange traded derivative contracts. After taking into account the effect of netting arrangements, our credit exposure was reduced to $23 million.

The size and mix of our derivative portfolio varies from time to time based upon our analysis of current and future market conditions. The following table presents the fair values of our open derivative financial instruments on a gross basis.

	Assets		Liabilities	
	January 1, 2023	January 2, 2022	January 1, 2023	January 2, 2022
	(in millions)		(in millions)	
Derivatives using the "hedge accounting" method:				
Commodity contracts	$ 21	$ 37	$ 13	$ 8
Foreign exchange contracts	1	—	—	1
Total	23	37	13	9
Derivatives using the "mark-to-market" method:				
Commodity contracts	31	33	12	7
Foreign exchange contracts	—	1	—	—
Total	32	33	12	7
Total fair value of derivative instruments	$ 54	$ 71	$ 25	$ 16

A portion of our derivatives are exchange traded futures contracts held with brokers, subject to netting arrangements that are enforceable during the ordinary course of business. Additionally, we have a portfolio of over-the-counter derivatives that are held by counterparties under netting arrangements found in typical master netting agreements. These agreements legally allow for net settlement in the event of bankruptcy. We offset the fair values of derivative assets and liabilities, along with the related cash collateral, that are executed with the same counterparty under these arrangements in the consolidated balance sheets.

The following tables reconcile the gross amounts of derivative assets and liabilities to the net amounts presented in our consolidated balance sheets and the related effects of cash collateral under netting arrangements that provide a legal right of offset of assets and liabilities.

	January 1, 2023				
	Gross Amount of Derivative Assets/ Liabilities	Netting of Derivative Assets/ Liabilities	Net Derivative Assets/ Liabilities	Netting of Derivative and Cash Collateral	Net Amount Presented in the Consolidated Balance Sheet [(1)]
	(in millions)				
Assets:					
Commodities	$ 53	$ (18)	$ 35	$ 25	$ 61
Foreign exchange contracts	1	—	1	—	1
Total	$ 54	$ (18)	$ 36	$ 25	$ 62
Liabilities:					
Commodities	24	(18)	7	(3)	4
Foreign exchange contracts	—	—	—	—	—
Total	$ 25	$ (18)	$ 7	$ (3)	$ 4

(1) We recorded $60 million of the net derivative assets in prepaid expenses and other current assets and the remaining $2 million in other assets, and $3 million of the net derivative liabilities in accrued expenses and other current liabilities and the remaining $1 million in other liabilities.

	January 2, 2022				
	Gross Amount of Derivative Assets/ Liabilities	Netting of Derivative Assets/ Liabilities	Net Derivative Assets/ Liabilities	Netting of Derivative and Cash Collateral	Net Amount Presented in the Consolidated Balance Sheet [(1)]
	(in millions)				
Assets:					
Commodities	$ 70	$ (12)	$ 58	$ 40	$ 98
Foreign exchange contracts	1	(1)	—	—	—
Total	$ 71	$ (13)	$ 58	$ 40	$ 98
Liabilities:					
Commodities	15	(12)	3	(2)	—
Foreign exchange contracts	1	(1)	1	—	1
Total	$ 16	$ (13)	$ 3	$ (2)	$ 1

(1) We recorded $87 million of the net derivative assets in prepaid expenses and other current assets and the remaining $11 million in other assets. Net derivative liabilities are recorded in accrued expenses and other current liabilities.

See Note 12: Fair Value Measurements for additional information about the fair value of our derivatives.

Hedge Accounting Method

Cash Flow Hedges

We enter into derivative instruments, such as futures, swaps and options contracts, to manage our exposure to the variability in expected future cash flows attributable to commodity price risk associated with the forecasted sale of fresh pork and the forecasted purchase of grains, hogs, and energy. In addition, we enter into interest rate swaps to manage our exposure to changes in interest rates associated with our variable interest rate debt and the forecasted issuance of fixed rate debt. Lastly, we enter into foreign exchange contracts to manage our exposure to the variability in expected future cash flows attributable to changes in foreign exchange rates associated with the forecasted purchase or sale of assets denominated in foreign currencies. As of January 1, 2023, substantially all of our commodity-related cash flow hedges were for transactions forecasted through June 2023.

When cash flow hedge accounting is applied, derivative gains or losses are recognized as a component of other comprehensive income (loss) and reclassified into earnings in the same period or periods during which the hedged transactions affect earnings.

During 2022, the range of notional volumes associated with open derivative instruments designated in cash flow hedging relationships was as follows:

	Minimum	Maximum	Metric
Commodities:			
Lean hogs	11,760,000	648,920,000	Pounds
Corn	14,840,000	63,880,000	Bushels
Soybean meal	57,400	476,600	Tons
Natural Gas	—	13,200,000	Million BTU
Foreign currency [1]	23,434,522	65,370,985	U.S. Dollars

(1) Amounts represent the U.S. Dollar equivalent of various foreign currency contracts.

The following table presents the effects on our consolidated financial statements of pre-tax gains and losses on derivative instruments designated in cash flow hedging relationships for the periods indicated:

	Gains (Losses) Recognized in Other Comprehensive Income (Loss) on Derivative			Gains (Losses) Reclassified from Accumulated Other Comprehensive Loss into Earnings		
	Twelve Months Ended			Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021	January 1, 2023	January 2, 2022	January 3, 2021
		(in millions)			(in millions)	
Commodity contracts	$ 58	$ (49)	$ 470	$ 97	$ (7)	$ 415
Interest rate swaps	—	2	(9)	(1)	(1)	(1)
Foreign exchange contracts	—	(1)	(1)	(1)	(1)	—
Total	$ 58	$ (48)	$ 460	$ 94	$ (9)	$ 415

We expect to reclassify $10 million ($7 million net of tax) of deferred gains on closed commodity and interest rate contracts into earnings within the next twelve months. We are unable to estimate the amount of unrealized gains or losses to be reclassified into earnings within the next twelve months related to open contracts as their values are subject to change.

Fair Value Hedges

We enter into derivative instruments (primarily futures contracts) that are designed to hedge changes in the fair value of firm commitments to buy grains and hogs. When fair value hedge accounting is applied, derivative gains and losses are recognized in earnings concurrently with the change in fair value of the hedged item attributable to the risk being hedged.

During 2022, the range of notional volumes associated with open derivative instruments designated in fair value hedging relationships was as follows:

	Minimum	Maximum	Metric
Lean hogs	12,000,000	48,640,000	Pounds
Corn	2,530,000	15,510,000	Bushels
Soybeans	155,000	1,980,000	Bushels
Soybean Meal	—	99,300	Tons

The following amounts were recorded in the consolidated balance sheets related to fair value hedges:

Balance Sheet Classification	Carrying Amount of Hedged Assets		Fair Value Hedging Adjustment Included in the Carrying Amount of Hedged Assets	
	January 1, 2023	January 2, 2022	January 1, 2023	January 2, 2022
	(in millions)		(in millions)	
Prepaid expenses and other current assets (1)	$ 1	$ 3	$ 1	$ 3

(1) Changes in the fair value of firm commitments to buy grains and hogs that are designated in fair value hedge relationships are recorded in the consolidated balance sheets in prepaid expenses and other current assets. When the underlying grains or hogs are acquired, the hedge relationship is discontinued and the fair value hedge adjustment is reclassified to inventories. The amount of fair value hedge adjustments remaining in inventories for which hedge accounting has been discontinued was a loss of $4 million and $5 million as of January 1, 2023 and January 2, 2022, respectively.

Mark-to-Market Method

Derivative instruments that are not designated as a hedge, have been de-designated from a hedging relationship, or do not meet the criteria for hedge accounting are marked-to-market with the unrealized gains and losses together with actual realized gains and losses from closed contracts being recognized in current period earnings.

During 2022, the range of notional volumes associated with open derivative instruments using the "mark-to-market" method was as follows:

	Minimum	Maximum	Metric
Commodities:			
Lean hogs	600,000	227,405,087	Pounds
Corn	12,624,613	41,911,329	Bushels
Soybean meal	33,532	178,027	Tons
Soybeans	290,000	5,295,000	Bushels
Wheat	275,000	1,435,000	Bushels
Pork cutout	—	24,160,000	Pounds
Pork bellies	—	18,600,000	Pounds
Hams	—	3,250,000	Pounds
Cheese	—	2,500,000	Pounds
Soybean Oil	—	600,000	Pounds
Natural gas	5,150,000	10,220,000	Million BTU
Heating oil	—	840,000	Gallons
Diesel	14,112,000	22,680,000	Gallons
Foreign currency (1)	50,457,261	97,557,669	U.S. Dollars

(1) Amounts represent the U.S. Dollar equivalent of various foreign currency contracts.

Derivative Impact on the Consolidated Statements of Income

The following table presents the effect of derivatives on the consolidated statements of income for the periods indicated:

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
		(in millions)	
Sales			
Cash flow hedging - commodity contracts	$ (30)	$ (177)	$ 597
Cash flow hedging - foreign exchange contracts	(1)	(1)	—
Mark to market - commodity contracts	(35)	—	—
Total derivative gain (loss) recognized sales	(67)	(178)	597
Cost of Sales			
Cash flow hedging - commodity contracts	127	170	(160)
Fair value hedging - commodity contracts			
Change in fair value of open derivatives	(24)	(27)	12
Change in fair value of related hedged items	24	27	(12)
Gain (loss) on closed derivatives [1]	(28)	(30)	26
Mark to market - commodity contracts	20	(9)	(15)
Total derivative gain (loss) recognized in cost of sales	119	131	(149)
Other (income) expense			
Mark to market - Foreign exchange contracts	5	(1)	1
Interest expense			
Cash flow hedging - interest rate contracts	(1)	(1)	(1)
Total derivative gain (loss)	$ 56	$ (50)	$ 448

(1) Represents the amount of fair value hedge adjustment applied to the carrying amount of hedged assets that is recognized in cost of sales as the underlying hedged assets are relieved from inventories and charged to cost of sales.

NOTE 6: EQUITY METHOD INVESTMENTS

Equity method investments consists of the following:

Equity Investments	% Owned	January 1, 2023	January 2, 2022
		(in millions)	
Align	50%	$ 99	$ 81
Monarch	33%	90	58
Viceroy	50%	18	—
Norson	50%	—	47
All other equity method investments	50%	17	13
Total investments		$ 224	$ 199

Monarch and Viceroy

In February 2022, we formed a joint venture, Viceroy Bio Energy, LLC (Viceroy), with our partner in Monarch Bio Energy, LLC (Monarch). Upon formation, Monarch contributed $36 million of assets related to certain biogas operations to Viceroy. Also in February 2022, Monarch issued additional shares representing a 33% ownership interest to TPG Rise Monsoon, LP (TPG) for $193 million. As a result, our ownership interest in Monarch was reduced from 50% to 33%, which was accounted for as a partial sale of our investment and resulted in a $52 million gain, which was calculated as the difference between the implied fair value of the shares sold and their carrying amount. The gain was recorded in the first quarter of 2022 in non-operating (gains) losses in the consolidated statement of income.

Norson

In the first quarter of 2022, our joint venture, Norson Holding, S. de R.L. de C.V. (Norson), breached a financial covenant under its debt agreements. As a result, Norson was unable to further borrow under the existing agreement. We evaluated our investment in Norson for impairment. Based on our evaluation, we determined that our investment was impaired and the impairment was other than temporary. As such, we wrote down the value of our investment in Norson by $40 million to its estimated fair value in the first quarter of 2022. This impairment was recognized in non-operating (gains) losses in the consolidated statement of income.

On November 22, 2022 we closed on the sale of Norson, as well as the sale of our wholly-owned subsidiary, Smithfield Foods de Mexico, S. de R.L. de C.V., which held our investment in Norson and certain farms that had been leased to Norson, to our joint venture partner for $26 million. Simultaneously, Norson repaid an outstanding $5 million note due to us. We recognized a gain of $4 million on the sale in non-operating (gains) losses in the consolidated statement of income in the fourth quarter of 2022, inclusive of $16 million of currency translation losses, which were reclassified from accumulated other comprehensive loss.

Variable Interest Entities

Monarch, Viceroy and Align are variable interest entities, which operate renewable natural gas facilities. We are not the primary beneficiary of these entities as all significant operating decisions are made jointly between us and our investment partners.

NOTE 7: DEBT

Long-term debt consists of the following:

	January 1, 2023	January 2, 2022
	(in millions)	
4.25% senior unsecured notes, due February 2027, net of unamortized debt issuance costs and discounts totaling $3 million and $3 million as of January 1, 2023 and January 2, 2022, respectively	$ 597	$ 597
2.625% senior unsecured notes, due September 2031, net of unamortized debt issuance costs and discounts totaling $9 million and $10 million as of January 1, 2023 and January 2, 2022, respectively	491	490
3.00% senior unsecured notes, due October 2030, net of unamortized debt issuance costs and discounts totaling $9 million and $10 million as of January 1, 2023 and January 2, 2022, respectively	491	490
5.20% senior unsecured notes, due April 2029, net of unamortized debt issuance costs and discounts totaling $4 million and $4 million as of January 1, 2023 and January 2, 2022, respectively	396	396
Various bank borrowings, interest rates from 2.45% to 8.13%, due January 2023 through March 2026	245	165
Total debt	2,221	2,137
Current portion	(90)	(144)
Total long-term debt	$ 2,131	$ 1,993

Working Capital Facilities

	January 1, 2023			
Facility	Capacity	Outstanding Borrowings	Outstanding Letters of Credit	Amount Available
	(in millions)			
Senior unsecured revolving credit facility	$ 2,100	$ —	$ —	$ 2,100
Accounts receivable securitization facility	275	—	(25)	250
International facilities	359	(211)	(4)	143
Total credit facilities	$ 2,734	$ (211)	$ (29)	$ 2,494

Our $2,100 million senior unsecured revolving credit facility (Senior Credit Facility) matures May 21, 2026, with the option to extend the maturity date for up to two 1-year periods, subject to obtaining the lenders' consent and satisfaction of certain other conditions. The Senior Credit Facility bears interest at LIBOR plus a margin ranging from 0.875% to 1.50% per annum, or, at our election, at a base rate plus a margin ranging from 0.00% to 0.50% per annum, in each case depending on our senior unsecured debt rating. The Senior Credit Facility also contains financial maintenance covenants requiring us to maintain a maximum total consolidated leverage ratio (ratio of consolidated funded debt to consolidated capitalization) of 0.50 to 1.00 (which the Company may elect to increase to 0.55 to 1.00 with respect to any fiscal quarter in which a material acquisition is consummated and the immediately following three consecutive fiscal quarters) and a minimum interest coverage ratio (ratio of consolidated EBITDA to consolidated interest expense) of 3.50 to 1.00.

In December 2022, the accounts receivable securitization facility (Securitization Facility) was refinanced, extending the maturity to December 22, 2025 and decreasing the maximum facility size from $350 million to $275 million. Along with the extension of the Securitization Facility, a $250 million receivables purchase agreement (Purchase Agreement) was arranged. Under the Purchase Agreement, certain accounts receivable of our major domestic meat processing subsidiaries are sold to a wholly-owned "bankruptcy remote" special purpose vehicle (SPV). The SPV pledges all receivables as security for loans and letters of credit and, at Smithfield's election, may sell certain accounts receivable to purchasing banks. The SPV is included in our consolidated financial statements and therefore, the accounts receivable owned by it are included in our consolidated balance sheets. However, the accounts receivable owned by the SPV are separate and distinct from our other assets and are not available to our other creditors should we become insolvent. As of January 1, 2023, the SPV held $574 million of accounts receivable and we had $25 million in letters of credit issued under the Securitization Facility. None of the letters of credit were drawn upon.

Our international facilities are comprised of several committed, bilateral revolving credit facilities used to fund the working capital needs of our operations in Europe. The international facilities have various maturities the latest of which is February 2025. These facilities are primarily denominated in the functional currency of each of our European operations or Euro. The international facilities contain no significant financial ratio covenants. Certain international facilities are guaranteed by Smithfield Foods, Inc. and other international facilities are collateralized with European fixed assets, receivables and inventory.

Scheduled principal payments on debt for the next five years are as follows:

Year	(in millions)
2023	$ 90
2024	148
2025	5
2026	2
2027	597

NOTE 8: LEASE OBLIGATIONS, COMMITMENTS, AND GUARANTEES

Lease Obligations

We lease real estate, vehicles, machinery, and other equipment. Additionally, we have contracts with independent farmers to raise our hogs that include a lease component for the use of the farmers' facilities. Our leases may include options to extend or terminate the lease, variable lease payments based on usage of the underlying assets, and residual value guarantees.

The following table presents the maturities of our lease obligations:

	Operating Leases	Finance Leases	Total
		(in millions)	
2023	$ 88	$ 8	$ 96
2024	74	7	81
2025	59	6	65
2026	45	5	50
2027	36	4	40
After 2027	264	31	295
Total lease payments	$ 565	$ 62	$ 626
Present value discount	(123)	(9)	(131)
Present value of lease obligations	$ 442	$ 53	$ 495

The following table presents the weighted-average lease term and discount rate for our finance and operating leases:

	January 1, 2023	January 2, 2022
Weighted-average remaining lease term (years):		
Finance leases	12	11
Operating leases	11	8
Weighted-average discount rate:		
Finance leases	3.3 %	1.4 %
Operating leases	4.4 %	4.2 %

The components of total lease cost are as follows:

	Twelve Months Ended	
	January 1, 2023	January 2, 2022
	(in millions)	
Operating lease cost	$ 125	$ 131
Finance lease cost:		
Amortization of leased assets	5	4
Interest on lease obligations	1	—
Short-term lease cost [1]	90	69
Variable lease cost [2]	27	17
Total lease cost	$ 248	$ 222

(1) Short-term lease cost represents the expense for leases with terms of one year or less, which are not included in the lease obligation

(2) Variable lease cost represents the expense for leases with terms that vary based on usage or changes in other circumstances, which are not included in the lease obligation.

The following table presents the classification of lease payments in the statement of cash flows associated with our lease obligations, as well as new, or modifications to existing, lease obligations entered into during the periods presented:

	Twelve Months Ended	
	January 1, 2023	January 2, 2022
	(in millions)	
Classification of lease payments:		
Operating cash flows - operating leases	$ 122	$ 133
Financing cash flows - finance leases	6	6
New, or modifications to existing, finance lease obligations	30	6
New, or modifications to existing, operating lease obligations	159	132

Commitments

We have purchase commitments with certain livestock producers that obligate us to purchase all the livestock that these producers deliver. Other arrangements obligate us to purchase a fixed amount of livestock. We have purchase commitments under forward grain contracts that obligate us to purchase a fixed amount of grain. We also have contractual commitments to independent farmers who raise our hogs in exchange for a performance-based service fee payable upon delivery. We estimate the future obligations under these commitments based on the amounts that are fixed and determinable in the related contracts. There are additional variable components of these contracts not included in our estimates that are based on quantities delivered and performance. Our estimated future obligations under these and other commitments are as follows:

Year	(in millions)
2023	$ 4,276
2024	1,900
2025	879
2026	621
2027	488

All minimum purchase commitments under these contracts were fulfilled for 2022, 2021 and 2020, respectively.

As part of our Align joint venture, we have committed to contribute up to $250 million through 2028 to fund various projects as they are approved by Align's board. As of January 1, 2023, we had contributed $102 million in capital toward this commitment.

We have committed to contribute up to $25 million to the TPG Rise Climate investment fund through July 2027. As of January 1, 2023, we had contributed $5 million in capital toward this commitment.

We had $18 million of committed funds related to approved capital expenditure projects as of January 1, 2023. These projects are expected to be funded with cash flows from operations and/or borrowings under credit facilities.

Guarantees

As part of our business, we are a party to various financial guarantees and similar commitments. These arrangements involve elements of performance and credit risk that are not included in the consolidated balance sheet as of January 1, 2023. We could become liable in connection with these obligations depending on the performance of the primary obligors or the occurrence of future events that we are unable to predict. If we consider it probable that we will become responsible for an obligation, we will record the liability in our consolidated balance sheet.

Smithfield and another joint venture partner in Monarch severally, but not jointly, guaranty an amount equal and up to 50% of Monarch's debt, interest and fees. The maximum amount of loans that could be outstanding under Monarch's debt agreement is $86 million and the loans mature in June 2025. Monarch's outstanding debt was $61 million as of the end of fiscal year 2022. The guaranty arrangement contains provisions that may increase our obligations under the guaranty depending on Monarch's debt to EBITDA ratio.

NOTE 9: INCOME TAXES

Income tax expense consists of the following:

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
		(in millions)	
Current income tax expense:			
Federal	$ 208	$ 57	$ 60
State	23	8	10
Foreign	24	24	26
	255	89	95
Deferred income tax expense (benefit):			
Federal	(6)	24	(41)
State	4	7	(23)
Foreign	6	8	—
	3	38	(64)
Total income tax expense	$ 258	$ 127	$ 31

A reconciliation of the federal statutory rate to our effective tax rate is as follows:

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
Federal income taxes at statutory rate	21.0 %	21.0 %	21.0 %
State income taxes, net of federal tax benefit [(1)]	1.9	2.0	(2.7)
Foreign income taxes	1.1	2.2	(0.9)
Tax credits [(2)]	(1.8)	(2.1)	(8.7)
Other	0.5	(1.9)	(1.2)
Effective tax rate	22.7 %	21.2 %	7.5 %

(1) The state income tax benefit in 2020 was a result of the remeasurement of deferred tax liabilities due to changes in state tax rates and the recognition of state tax credits.

(2) We recognized federal tax credits of $19 million, $12 million and $34 million in 2022, 2021 and 2020, respectively. The decrease in tax credits in 2021 is primarily due to the effect of disaster relief credits recognized in prior years, which did not reoccur.

The tax effects of temporary differences consist of the following:

	January 1, 2023	January 2, 2022
	(in millions)	
Deferred tax assets:		
Pension and other retirement liabilities	$ 73	$ 95
Operating lease obligations	108	97
Accrued expenses and other current liabilities	102	100
Tax credits, carryforwards and net operating losses [(1)]	74	78
R&D expenses	70	46
Deferred payroll taxes	24	36
Employee benefits	17	18
Other	21	15
	487	485
Valuation allowance [(2)]	(30)	(32)
Total deferred tax assets	$ 457	$ 453
Deferred tax liabilities:		
Property, plant and equipment	513	526
Intangible assets	324	323
Operating lease assets	105	95
Inventory	52	42
Investments	38	29
Derivatives	9	15
Other	12	4
Total deferred tax liabilities	$ 1,052	$ 1,034

(1) The tax credits, carryforwards and net operating losses expire between 2023 to 2042.

(2) Valuation allowances are established if the Company's deferred tax assets are not more likely than not to be realized. The valuation allowance primarily relates to state credits, state net operating loss carryforwards and losses in foreign jurisdictions.

Smithfield is included in its parent's consolidated federal income tax group and consolidated income tax return. The members of the consolidated group have elected to allocate income taxes among the members of the group by the separate return method, under which the parent company credits the subsidiary for income tax reductions resulting from the subsidiary's inclusion in the consolidated return, or the parent charges the subsidiary for its allocated share of the consolidated income tax liability.

We operate in multiple taxing jurisdictions, both within the U.S. and outside of the U.S., and are subject to examination from various tax authorities. The liability for unrecognized tax benefits was $44 million and $37 million as of January 1, 2023 and January 2, 2022, which included $12 million and $12 million of accrued interest, respectively.

We are currently being audited in several tax jurisdictions and remain subject to examination until the statute of limitations expires for the respective tax jurisdiction. Within specific countries, we may be subject to audit by various tax authorities, or subsidiaries operating within the country may be subject to different statute of limitations expiration dates. We have concluded all U.S. federal income tax matters through the tax year ended January 1, 2017. We are currently under U.S federal examination for the tax years ended December 31, 2017, December 30, 2018, December 29, 2019, January 3, 2021, January 2, 2022 and January 1, 2023.

We consider the earnings of our foreign subsidiaries to be indefinitely reinvested as we intend to use these earnings in our foreign operations. The amount of foreign subsidiary net earnings that was considered indefinitely reinvested was $906 million and $812 million as of January 1, 2023 and January 2, 2022, respectively, which is considered previously taxed income (PTI). The determination of any unrecorded deferred tax liability on the remaining excess carrying amount of our investments over their respective tax bases is not practicable due to the uncertainty of how these investments would be recovered and such differences are not expected to be recognized in the foreseeable future.

NOTE 10: PENSION AND OTHER RETIREMENT PLANS

Company Sponsored Defined Benefit Pension Plans

We have historically provided the majority of our U.S. employees with pension benefits. In the second quarter of 2021, we amended our qualified pension plans to freeze the benefit accrual for all non-union participants as of June 30, 2021. As a result of this amendment, we performed an interim remeasurement of our plan obligations and assets in the second quarter of 2021. The remeasurement resulted in a curtailment gain of $110 million, of which $105 million was recognized in other comprehensive income (loss), and the remainder in non-operating (gains) losses.

The following table presents a reconciliation of the pension benefit obligation, plan assets and the funded status of our pension plans:

	January 1, 2023	January 2, 2022
	(in millions)	
Change in benefit obligation:		
Benefit obligation at beginning of year	$ 2,577	$ 2,698
Service cost	23	53
Interest cost	77	76
Plan amendments	—	5
Plan curtailments	—	(110)
Benefits paid	(125)	(125)
Actuarial gain	(736)	(19)
Benefit obligation at end of year	1,816	2,577
Change in plan assets: [(1)]		
Fair value of plan assets at beginning of year	2,194	2,123
Actual return on plan assets	(574)	175
Employer contributions	22	20
Benefits paid	(125)	(125)
Fair value of plan assets at end of year	1,518	2,194
Funded status	$ 299	$ 384
Amounts recognized in the consolidated balance sheets:		
Net long-term pension liability	276	360
Accrued expenses and other current liabilities	23	23
Net amount recognized at end of year	$ 299	$ 384

(1) Excludes the assets and related activity of our non-qualified defined benefit pension plans. The fair value of assets related to our non-qualified plans was $119 million and $149 million as of January 1, 2023 and January 2, 2022, respectively. These assets are recorded in prepaid expenses and other current assets, and other assets within the consolidated balance sheets.

The accumulated benefit obligation for all defined benefit pension plans was $1.8 billion and $2.6 billion as of January 1, 2023 and January 2, 2022, respectively. The accumulated benefit obligation exceeded plan assets for all defined benefit plans as of January 1, 2023 and January 2, 2022, respectively.

The following table shows the pre-tax unrecognized items included as components of accumulated other comprehensive loss related to our defined benefit pension plans as of the dates indicated:

	January 1, 2023	January 2, 2022
	(in millions)	
Unrecognized actuarial loss	$ (509)	$ (573)
Unrecognized prior service cost	(4)	(4)

The following table presents the components of the net periodic pension cost (benefit) for the periods indicated:

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
	(in millions)		
Service cost	$ 23	$ 53	$ 85
Interest cost	77	76	80
Expected return on plan assets	(128)	(128)	(114)
Net amortization	23	34	50
Curtailment gain	—	(4)	—
Net periodic pension cost (benefit)	$ (6)	$ 31	$ 101

The following table shows our weighted average assumptions for the periods indicated:

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
Discount rate to determine net periodic pension cost (benefit)	3.07 %	3.16 %	3.50 %
Discount rate to determine benefit obligation	5.57	3.06	2.76
Expected long-term rate of return on plan assets	6.00	6.25	6.25
Rate of compensation increase	4.00	4.00	4.00

We use an independent third-party actuary to assist in the determination of assumptions used and the measurement of our pension obligation and related costs. We review and select the discount rate to be used in connection with our pension obligation annually. In determining the discount rate, a hypothetical bond portfolio is constructed based on bonds (with a AA rating or better) whose cash flows from coupons and maturities match the year-by-year projected benefit payments from defined benefit pension plans. We use the resulting yield of this portfolio to determine the discount rate applicable to our obligation. A similar methodology is used to develop the discount rate applicable to service cost.

To determine the expected long-term return on plan assets, we consider the current and anticipated asset allocations, as well as historical and estimated returns on various categories of plan assets. Long-term trends are evaluated relative to market factors such as inflation, interest rates and fiscal and monetary policies in order to assess the capital market assumptions. Actual results that differ from our assumptions are recorded in accumulated other comprehensive loss and amortized over future periods and, therefore, affect expense in future periods.

Pension plan assets may be invested in cash and cash equivalents, equities, commingled funds, debt securities and alternative investments. Our investment policy for the pension plans is to balance risk and return through a diversified portfolio of high-quality equity and fixed income securities. Maturity for fixed income securities is managed such that sufficient liquidity exists to meet near-term benefit payment obligations. The plans retain outside investment advisors to manage plan investments within parameters established by our plan trustees.

The following table presents the fair value of our qualified pension plan assets by major asset category. The allocation of our pension plan assets is based on the target range presented in the following table.

	January 1, 2023	January 2, 2022	Target Range
Asset category:	(in millions)		
Cash and cash equivalents, net of unsettled transactions	$ 157	$ 128	0-10%
Equity securities	539	908	35-55%
Debt securities	521	891	35-55%
Alternative assets	301	266	0-20%
Total plan assets	$ 1,518	$ 2,194	

See Note 12: Fair Value Measurements for additional information about the fair value of our pension assets.

We do not have a funding requirement and do not expect to make any contributions to our qualified pension plans in 2023.

Expected future benefit payments for our defined benefit pension plans are as follows:

Fiscal Year	(in millions)
2023	$ 116
2024	118
2025	122
2026	119
2027	121
2028 - 2032	632

Other Employee Benefit Plans

We sponsor defined contribution pension plans (401(k) plans) covering substantially all U.S. employees. Our contributions vary depending on the plan but are based primarily on each participant's level of contribution and cannot exceed the maximum allowable for tax purposes. Coinciding with the freeze of our defined benefit plan, we increased the rate of employer contributions for our 401(k) plan from a 50% match on up to 4% of employee earnings to a 100% match on up to 7% of employee earnings. Total contributions were $68 million, $47 million, and $35 million, in 2022, 2021 and 2020, respectively.

NOTE 11: EQUITY

Stock-Based Compensation

During 2014, WH Group adopted a share incentive plan to provide incentives to various executives and management of WH Group and its subsidiaries, including Smithfield (the WH Group Incentive Plan). Stock options granted under the WH Group Incentive Plan were subject to graded vesting over five years and valued in five separate tranches, according to the expected life of each tranche. All options granted under the WH Group Incentive Plan were fully vested in 2019. No stock compensation expense was recognized in any period presented.

The following table summarizes stock option activity for Smithfield employees under the WH Group Incentive Plan as of January 1, 2023, and changes during the year then ended:

	Number of Shares	Weighted Average Exercise Price (HKD)	Weighted Average Exercise Price (USD)	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (HKD)	Aggregate Intrinsic Value (USD)
					(in millions)	
Outstanding as of January 2, 2022	94,088,244	$ 6.20	$ 0.80			
Forfeited	(4,046,315)	$ 6.20	$ 0.80			
Outstanding as of January 1, 2023	90,041,929	$ 6.20	$ 0.80	1.6	$ —	$ —
Exercisable as of January 1, 2023	90,041,929	$ 6.20	$ 0.80	1.6	$ —	$ —

Accumulated Other Comprehensive Loss

Accumulated other comprehensive income (loss) consists of the following (net of tax):

	January 1, 2023	January 2, 2022	January 3, 2021
		(in millions)	
Foreign currency translation	$ (327)	$ (258)	$ (161)
Pension accounting	(389)	(434)	(570)
Hedge accounting	8	35	64
Accumulated other comprehensive loss	$ (708)	$ (656)	$ (667)

Other Comprehensive Income (Loss)

The following table presents changes in the balances for each component of accumulated other comprehensive loss and the related effects on net income of amounts reclassified therefrom.

	Twelve Months Ended								
	January 1, 2023			January 2, 2022			January 3, 2021		
	Before Tax	Tax	After Tax	Before Tax	Tax	After Tax	Before Tax	Tax	After Tax
	(in millions)								
Foreign currency translation:									
Translation gains (losses) [(1)]	$ (74)	$ —	$ (75)	$(134)	$ 3	$(131)	$ 41	$ —	$ 41
Translation losses reclassified to non-operating (gains) losses	16	—	16	35	—	35	—	—	—
Retirement benefits:									
Actuarial gains (losses)	36	(8)	27	68	(22)	47	(173)	45	(129)
Curtailment gain arising during the period	—	—	—	105	(33)	72	—	—	—
Prior service cost	—	—	—	(5)	2	(3)	—	—	—
Amortization of actuarial losses, prior service credits and curtailment gains reclassified to non-operating (gains) losses	23	(5)	17	30	(10)	21	51	(13)	38
Derivatives:									
Gains (losses) arising during the period	58	(15)	43	(49)	12	(37)	460	(118)	342
(Gains) losses reclassified to sales	32	(8)	24	178	(46)	132	(571)	147	(424)
(Gains) losses reclassified to cost of sales	(127)	33	(95)	(170)	44	(126)	155	(40)	115
Losses reclassified to interest expense	1	—	1	1	—	1	1	—	1
Effect of change in accounting principle	—	—	—	1	—	1	—	—	—
Total other comprehensive income (loss)	$ (37)	$ (5)	$ (41)	$ 61	$ (50)	$ 11	$ (36)	$ 20	$ (16)
Other comprehensive income (loss) attributable to noncontrolling interest	11	—	11	—	—	—	—	—	—
Other comprehensive income attributable to Smithfield	$ (47)	$ (5)	$ (52)	$ 61	$ (50)	$ 11	$ (36)	$ 20	$ (16)

(1) We consider the earnings in our non-U.S. subsidiaries to be indefinitely reinvested, and accordingly, record no deferred income taxes on these earnings.

NOTE 12: FAIR VALUE MEASUREMENTS

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We are required to consider and reflect the assumptions of market participants in fair value calculations. These factors include nonperformance risk (the risk that an obligation will not be fulfilled) and credit risk, both of the reporting entity (for liabilities) and of the counterparty (for assets).

We use, as appropriate, a market approach (generally, data from market transactions), an income approach (generally, present value techniques), and/or a cost approach (generally, replacement cost) to measure the fair value of an asset or liability. These valuation approaches incorporate inputs, such as observable, independent market data, that we believe are predicated on the assumptions market participants would use to price an asset or liability. These inputs may incorporate, as applicable, certain risks such as nonperformance risk, which includes credit risk.

The FASB has established a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The fair value hierarchy gives the highest priority to quoted market prices (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of inputs used to measure fair value are as follows:

- Level 1—quoted prices in active markets for identical assets or liabilities accessible by the reporting entity.

- Level 2—observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.
- Level 3—unobservable for an asset or liability. Unobservable inputs should only be used to the extent observable inputs are not available.

We have classified assets and liabilities measured at fair value based on the lowest level of input that is significant to the fair value measurement. For the periods presented, we had no transfers of assets or liabilities between levels within the fair value hierarchy. The timing of any such transfers would be determined at the end of each reporting period.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following tables set forth, by level within the fair value hierarchy, our financial assets and liabilities, including assets held in a rabbi trust used to fund our non-qualified defined benefit plan, that were measured at fair value on a recurring basis:

	January 1, 2023				January 2, 2022			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
	(in millions)				(in millions)			
Assets								
Derivatives:								
Commodity contracts	$ 20	$ 12	$ 21	$ 53	$ 37	$ 21	$ 11	$ 70
Foreign exchange contracts	—	1	—	1	—	1	—	1
Mutual funds [(1)]	38	—	—	50	52	—	—	66
Insurance contracts	—	112	—	112	—	137	—	137
Total	$ 57	$ 125	$ 21	$ 216	$ 90	$ 159	$ 11	$ 273
Liabilities								
Derivatives:								
Commodity contracts	12	12	—	24	13	2	—	15
Foreign exchange contracts	—	—	—	—	—	1	—	1
Total	$ 12	$ 13	$ —	$ 25	$ 13	$ 3	$ —	$ 16

(1) Institutional funds that are not publicly traded are estimated at fair value using the net asset value (NAV) per share of the investment as a practical expedient and are not categorized in the fair value hierarchy. Therefore, the sum of the values categorized in the fair value hierarchy above do not agree to the total.

The following are descriptions of the valuation methodologies and key inputs used to measure financial assets and liabilities recorded at fair value on a recurring basis:

- *Derivatives*—Derivatives classified within Level 1 are valued using quoted market prices. In some cases where quoted market prices are not available, we value the derivatives using market based pricing models that utilize the net present value of estimated future cash flows to calculate fair value, in which case the measurements are classified within Level 2. These valuation models make use of market-based observable inputs, including exchange traded prices and rates, yield curves, credit curves and measures of volatility. Level 3 derivatives are valued based on diesel fuel prices and use both observable and unobservable inputs. There is a lack of price transparency with respect to forward prices for diesel fuel. Such unobservable inputs are significant to the diesel fuel derivative contract valuation methodology.
- *Mutual funds*—Mutual funds consist of publicly traded funds and other institutional funds that are not publicly traded. Publicly traded mutual funds are measured at fair value using quoted market prices and are categorized in Level 1 within the fair value hierarchy.
- *Insurance contracts*—Insurance contracts are valued at their cash surrender value using the daily asset unit value which is based on the quoted market price of the underlying securities and classified within Level 2.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

Certain assets and liabilities are measured at fair value on a nonrecurring basis after initial recognition; that is, the assets and liabilities are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances, for example, when there is evidence of impairment. As of January 1, 2023, we had no significant assets or liabilities that were measured and recorded at fair value on a nonrecurring basis after initial recognition.

We recorded charges of $40 million, $1 million and $25 million in 2022, 2021 and 2020, respectively, to write down certain assets to their estimated fair values. Fair value was estimated using a variety of fair value techniques, including an income approach and a market approach based on the relevant information available, which consisted of level 3 inputs. The 2022 charge was recorded in non-operating (gains) losses and represents the Norson impairment, see Note: 6 Investments for more information. The charges for 2021 and 2020 were recorded in other (income) expense on the consolidated statements of income. The fair value of these assets at the time of remeasurement was not material.

Pension Plan Assets

The following table summarizes our qualified pension plan assets measured at fair value on a recurring basis (at least annually):

	January 1, 2023				January 2, 2022			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
	(in millions)				(in millions)			
Cash and cash equivalents	$ 113	$ —	$ —	$ 113	$ 110	$ —	$ —	$ 110
Equity securities:								
U.S. common stock:								
Health care	5	—	—	5	6	—	—	6
Financial services	17	(1)	—	16	20	1	—	21
Retail and consumer products	9	—	—	9	12	—	—	12
Energy	4	—	—	4	3	—	—	3
Information technology	12	—	—	12	18	—	—	18
Manufacturing and industrials	12	—	—	12	18	—	—	18
Telecommunications	1	—	—	1	2	—	—	2
International common stock	23	—	—	23	22	—	—	22
Commingled funds: (1)								
Global equity	—	—	—	457	—	—	—	807
Corporate debt securities	—	—	—	155	—	—	—	151
Fixed income:								
Corporate debt securities	239	1	—	240	397	4	—	401
Government debt securities	140	(14)	—	126	329	10	—	338
Alternative investments:								
Diversified investment funds (1)	—	—	—	5	—	—	—	5
Limited partnerships (1)	—	—	—	296	—	—	—	260
Total fair value	$ 574	$ (14)	$ —	1,473	$ 937	$ 14	$ —	2,175
Unsettled transactions, net				45				18
Total plan assets				$ 1,518				$ 2,194

(1) Assets that are measured at fair value using NAV per share as a practical expedient and have not been categorized in the fair value hierarchy.

The following are descriptions of the valuation methodologies and key inputs used to measure pension plan assets recorded at fair value:

- *Cash and cash equivalents*—Cash equivalents include highly liquid investments with original maturities of three months or less. Due to their short-term nature, the carrying amount of these instruments approximates the estimated fair value. Actively traded money market funds are classified as Level 1 and included in cash and cash equivalents.
- *Equity securities*—The fair value of equity securities are based on quoted prices in active markets and classified as Level 1. Level 1 financial instruments include highly liquid instruments with quoted prices, such as equities and mutual funds traded in active markets.
- *Commingled funds*—The fair value of commingled funds are measured using the NAV per share practical expedient and have not been categorized in the fair value hierarchy. The NAV per share is based on the fair value of the underlying assets owned by the funds, minus its liabilities then divided by the total number of shares outstanding. Underlying assets of commingled funds primarily consist of liquid equity and fixed income securities with quoted prices in active markets.
- *Fixed income*—When available, the fair value of fixed income securities is based on quoted prices in active markets and classified as Level 1. Level 1 financial instruments include highly liquid instruments with quoted prices, such as equities and mutual funds traded in active markets.

  If quoted prices are not available, fair values of fixed income instruments are obtained from pricing services, broker quotes or other model-based valuation techniques with observable inputs and classified as Level 2. The nature of these fixed income instruments include instruments for which quoted prices are available but traded less frequently, instruments whose fair value has been derived using a model where inputs to the model are directly observable in the market, or can be derived principally from or corroborated by observable market data and securities that are valued using other financial instruments, the parameters of which can be directly observed. Level 2 fixed income instruments include corporate debt securities.
- *Alternative investments*—The fair value of alternative investments are measured using the net asset value per share practical expedient and have not been categorized in the fair value hierarchy. The net asset value per share is based on the fair value of the underlying assets owned by the alternative investment funds, minus its liabilities then divided by the total number of shares outstanding.
- *Limited partnerships*—The fair value of limited partnerships is measured using the NAV practical expedient and has not been categorized in the fair value hierarchy. The NAV is based on the fair value of the underlying assets owned by the partnership, minus its liabilities then multiplied by the ownership percentage of the pension plans.

NOTE 13: RELATED PARTY TRANSACTIONS

The following tables present amounts of related party transactions and balances owed from and to related parties:

	January 1, 2023	January 2, 2022
	(in millions)	
Receivables from related parties [1]	$ 29	$ 14
Payables to and other current liabilities with related parties [2]	42	25

(1) Includes receivables from WH Group and its subsidiaries of $27 million and $11 million as of January 1, 2023 and January 2, 2022, respectively.
(2) Includes payables to our parent company of $27 million and $24 million as of January 1, 2023 and January 2, 2022.

	January 1, 2023	January 2, 2022	January 3, 2021
		(in millions)	
Sales to related parties [1]	$ 492	$ 887	$ 1,323
Payments to related parties [2]	732	405	344

(1) Sales to related parties includes $471 million, $860 million and $1,300 million in sales to subsidiaries of WH Group, and $20 million, $27 million and $23 million in sales to certain equity method investees for 2022, 2021 and 2020, respectively.
(2) Payments to related parties includes $520 million, $221 million and $129 million in payments to our parent company for 2022, 2021 and 2020, respectively, which primarily consist of dividends. Payments also include $209 million, $180 million and $208 million to certain equity method investees for 2022, 2021 and 2020, respectively, primarily for raw materials used in our hog production operations and cold storage fees.

NOTE 14: REGULATION AND CONTINGENCIES

Like other participants in our industry, we are subject to various laws and regulations administered by federal, state and other government entities, including the United States Environmental Protection Agency and corresponding state agencies, as well as the United States Department of Agriculture, the Grain Inspection, Packers and Stockyard Administration, the United States Food and Drug Administration, the United States Occupational Safety and Health Administration, the Commodity and Futures Trading Commission and similar agencies in foreign countries.

We, from time-to-time, receive notices and inquiries from regulatory authorities and others asserting that we are not in compliance with such laws and regulations. In some instances, litigation ensues. In addition, individuals may initiate litigation against us.

Our policy for establishing accruals and disclosures for contingent liabilities is contained in Note 1: Summary of Significant Accounting Policies. We reevaluate our reserves when facts and circumstances change regarding the litigation which could warrant an adjustment to the amount that is recorded.

Expenses and other liabilities associated with each of the claims discussed below will not affect our profits or losses in future periods unless our accrual proves to be insufficient or excessive. However, legal expenses incurred in our and our subsidiaries' defense of these claims and any payments made to plaintiffs through unfavorable verdicts or otherwise will negatively impact our cash flows and our liquidity position.

North Carolina Nuisance Litigation

In 2013, 25 complaints were filed in the Superior Court of Wake County, North Carolina by 479 individual plaintiffs against Smithfield and our wholly-owned subsidiary, Murphy-Brown LLC (Murphy-Brown), alleging causes of action for nuisance and related claims. All 25 complaints were dismissed without prejudice in 2014.

In 2014, 25 complaints were filed in the United States District Court for the Eastern District of North Carolina by 515 individual plaintiffs against our wholly-owned subsidiary, Murphy-Brown, alleging causes of action for nuisance and related claims. The complaints stemmed from the nuisance cases previously filed in the Superior Court of Wake County. On February 23, 2015, all 25 complaints were amended, one complaint was severed into two separate actions, and several additional plaintiffs were joined, bringing the total number of plaintiffs to 541. On June 29, 2015, the Court granted Murphy-Brown's motion to strike certain allegations in the complaints, and plaintiffs subsequently amended all 26 complaints pursuant to the Court's order. Ten plaintiffs dismissed their claims without prejudice. Murphy-Brown filed its answers and affirmative defenses to all 26 complaints on August 31, 2015, and the parties engaged in discovery. During discovery, several additional plaintiffs dismissed their claims. The 26 complaints include claims on behalf of 511 plaintiffs and related to approximately 14 company-owned and 75 contract farms. All 26 complaints included causes of action for temporary nuisance and negligence and sought recovery of an unspecified amount of compensatory, special and punitive damages.

After a series of five trials beginning in 2018 with verdicts in favor of the plaintiffs in each of the trials, we appealed most of these verdicts to the United States Court of Appeals for the Fourth Circuit. In June 2019, all progress on the litigation was stayed until resolution of the appeal of the first trial. The Fourth Circuit published its opinion on November 19, 2020. As a result of the Fourth Circuit's opinion, and pursuant to a settlement agreement, we resolved all issues in these complaints with all plaintiffs in January 2021.

We established a reserve for our estimated expenses to defend against these claims in 2013, which was subsequently reevaluated and increased in the fourth quarter of 2016, fourth quarter of 2017, second and fourth quarters of 2018, and second and fourth quarters of 2019. We recorded a final adjustment to increase our reserve for the settlement in the fourth quarter of 2020. Final payment of the settlement was made in the first quarter of 2021.

Antitrust Litigation

The Company has been named as one of 16 defendants in a series of purported class actions alleging antitrust violations in the pork industry. The purported class cases have been filed by three different groups of named plaintiffs: direct purchasers (companies that purchase pork products directly from pork producers), commercial indirect purchasers (companies such as restaurants and hotels that purchase pork from wholesalers for resale), and individual indirect purchasers (such as people who purchase pork at grocery stores). In all of these cases, the plaintiffs allege that starting in 2009 and continuing through at least June of 2018, the defendant pork producers agreed to reduce the supply of hogs in the United States in order to raise the price of hogs and all pork products. The plaintiffs in all of these cases also challenge the defendant pork producers' use of benchmarking reports from defendant Agri Stats, Inc., alleging that the reports allowed the pork producers to share proprietary information and monitor each producer's compliance with the supposed agreement to reduce supply. The direct purchasers seek treble damages, attorneys' fees, and costs under the federal antitrust laws, and the two groups of indirect purchasers seek treble damages, attorneys' fees, and costs under various state antitrust and consumer-protection statutes.

In addition to the putative class actions filed in 2018, Smithfield has been named as a defendant in similar antitrust lawsuits brought by a number of individual purchasers and not on behalf of a class. The plaintiffs in these non-class cases assert the same antitrust claims as the plaintiffs in the putative class actions and filed amended complaints. The Attorneys General for the states of New Mexico, Alaska and the Commonwealth of Puerto Rico have each filed a similar complaint on behalf of their respective states, territories, agencies and citizens.

Under an agreement dated June 29, 2021, the Company agreed to settle all direct-purchaser class claims for a single payment of up to $83 million. The terms of the settlement were approved by the court following notice to all class members. Due to the number of class members who elected to opt out of the settlement, under the terms of the settlement agreement, the final settlement amount was $77 million.

Under an agreement dated March 19, 2022, the Company agreed to settle all commercial and institutional indirect-purchaser class claims for a single payment of $42 million. The settlement was funded in the second quarter of 2022. The terms of the settlement received final approval from the court on October 19, 2022.

Under an agreement dated August 4, 2022, the Company agreed to settle all consumer indirect-purchaser class claims for a single payment of $75 million. The terms of the settlement were preliminarily approved by the court on November 9, 2022, but remain subject to final court approval following notice to class members. The $75 million settlement was funded in the fourth quarter of 2022.

Currently 35 individual cases are pending against the Company. Of those, three cases have been brought by commonwealths or states seeking recovery based on purchases made by their citizens (Alaska, New Mexico and Puerto Rico). The remaining 32 cases have been brought by customers who opted out of the class settlement. The Company intends to vigorously defend against the remaining claims.

We established an accrual for estimated losses and expenses to defend against these claims in 2020, which was subsequently reevaluated and increased in the second and fourth quarters of 2021.

Maxwell Foods Litigation

On August 13, 2020, Maxwell Foods, LLC (Maxwell) filed a complaint against Smithfield in the General Court of Justice, Superior Court Division for Wayne County, North Carolina. The complaint alleged that Smithfield breached the Production Sales Agreement (PSA) between the parties (as well as the duty of good faith and fair dealing): (i) by failing to provide Maxwell with the same pricing as other major hog suppliers in violation of a purported "Most-Favored-Nation Provision" found in a December 6, 1994 letter to Maxwell, (ii) by failing to comply with an implicit duty to negotiate the PSA to provide alternative pricing to Maxwell when the Iowa-Southern Minnesota market allegedly ceased to be viable; and (iii) by failing to purchase Maxwell's entire output of hogs since April 2020.

Smithfield filed a notice of removal to the United States District Court of the Eastern District of North Carolina. Smithfield also filed a motion to dismiss several of Maxwell's claims. On February 22, 2021, the U.S. District Court granted Maxwell's motion to remand the case to the Superior Court of Wayne County and left Smithfield's partial motion to dismiss the complaint for consideration by the state court in Wayne County.

On March 1, 2021, Maxwell filed an amended complaint, which added a claim under the North Carolina Unfair and Deceptive Trade Practices Act (UDTPA). Smithfield filed a notice of designation seeking assignment of the case to the North Carolina Business Court. Maxwell objected to such designation, and on April 13, 2021 the Business Court overruled Maxwell's objection.

The Business Court also dismissed two of Maxwell's claims: the implied duty to negotiate claim and the UDTPA claim. Maxwell subsequently filed another amended complaint adding a fraudulent concealment claim and a new breach of contract claim, as well as a request for punitive damages. The court dismissed the fraudulent concealment claim and the request for punitive damages. The three remaining claims, all for breach of contract, are: (1) the claim under the "Most-Favored-Nation Provision," (2) the claim that Smithfield failed to purchase Maxwell's entire output of hogs since April 2020, and (3) the claim that from time to time, Smithfield would calculate Maxwell's payment for a delivery of hogs using an average of the preceding week's weight rather than the actual weights of the hogs being delivered.

The parties are continuing to engage in discovery. The Company intends to vigorously defend against the remaining claims. In the first quarter of 2022, we established an accrual for our estimated expenses to defend against these claims.

Barden Hog Farm Litigation

On May 18, 2020, a claim was filed by 20 plaintiffs in the U.S. District Court for the Eastern District of North Carolina against Smithfield Foods, Inc. and Murphy-Brown LLC. The claims all arise from hog farms in Magnolia, Duplin County, which purportedly allow "odor, urine, feces, manure, flies and other vectors . . . to trespass onto Plaintiffs' properties." Counts brought by the plaintiffs are trespass, negligence, civil conspiracy, unfair and deceptive trade practices, and unjust enrichment.

On July 13, 2020 Smithfield filed a motion to dismiss to narrow plaintiffs' legal theories, and a motion to strike certain objectionable allegations in the plaintiffs' complaint. The plaintiffs voluntarily dismissed their unfair and deceptive trade practices claims, and on March 15, 2021, the court granted in part and denied in part the motion to dismiss, dismissing plaintiffs' civil conspiracy and unjust enrichment claims with prejudice. The court also denied the defendants' motion to strike certain objectionable allegations in the complaint.

Discovery has been completed, and the Company filed a motion for summary judgment seeking dismissal of all claims on December 30, 2022.

The Company intends to vigorously defend against these claims. In the first quarter of 2021, we established an accrual for our estimated expenses to defend against these claims.

Insurance Claims

In 2016, 2017, 2018, 2021 and 2022, several events occurred that damaged or destroyed assets and disrupted our business, including fires that damaged certain of our pork processing facilities in Illinois, North Carolina and Romania, fires on certain of our hog farms in Oklahoma, and Hurricane Florence. We maintain comprehensive general liability and property insurance, including business interruption insurance, with loss limits that we believe will provide substantial and broad coverage for the losses arising from these events.

In 2020, we received insurance proceeds of $19 million, of which $8 million was recognized in investing activities and the remainder in operating activities in the consolidated statement of cash flows. A $7 million gain on the insurance recovery was recognized in other (income) expense in the consolidated statement of income.

In 2022, we received insurance proceeds of $6 million, of which $2 million was recognized in investing activities and the remainder in operating activities in the consolidated statement of cash flows. A $6 million gain on the insurance recovery was recognized in other (income) expense in the consolidated statement of income.

We have claims against certain of our insurance carriers for losses we incurred in connection with nuisance litigation in the state of North Carolina, which we settled in the first quarter of 2021, and other litigations. In the third quarter of 2021, we reached a settlement with one of our carriers for $30 million, which was recognized as a gain in other (income) expense. The settlement funds were received in October 2021.

Any additional insurance recoveries from these claims will be recognized if and when the claims are settled.

NOTE 15: SUPPLEMENTAL CASH FLOW INFORMATION

	Twelve Months Ended		
	January 1, 2023	January 2, 2022	January 3, 2021
Supplemental disclosures of cash flow information:		(in millions)	
Interest paid, including capitalized interest	$ (93)	$ (92)	$ (102)
Income taxes paid	(178)	(24)	(151)

NOTE 16 : SUBSEQUENT EVENTS

We evaluated subsequent events from January 2, 2023 through March 28, 2023, the date the consolidated financial statements were available to be issued.

On February 28, 2023, we purchased Goodies Meat Production S.R.L. (Goodies), a Romanian producer of private-label packaged meats products, for €28 million ($28 million). The purchase price is subject to customary post-closing adjustments as well as contingent consideration of up to €5 million based on, among other things, the achievement of certain earnings targets over a two-year period. Goodies operates a production facility in Ceptura de Jos, Romania and employs 320 people. Their portfolio of products includes salami, ham, bacon, bologna and other meat specialties. The acquisition of Goodies is part of Smithfield’s strategic growth plan and complements and strengthens our existing European business.