

Cost of Sales and Gross Margin

The following table presents cost of sales and gross margin information:

	Fiscal		Change
	2019	2018	
	(\$ in millions)		
Cost of sales	\$ 9,054	\$ 9,243	\$ (189)
As a percentage of net sales	67.3 %	66.1 %	
Gross margin	\$ 4,394	\$ 4,745	\$ (351)
As a percentage of net sales	32.7 %	33.9 %	

In fiscal 2019, gross margin decreased \$351 million as compared to fiscal 2018, primarily as a result of lower volume, unfavorable product mix, negative foreign currency translation, and price erosion, partially offset by lower material costs. Gross margin as a percentage of net sales decreased to 32.7% in fiscal 2019 from 33.9% in fiscal 2018.

We use a wide variety of raw materials in the manufacture of our products. Cost of sales and gross margin are subject to variability in raw material prices which continue to fluctuate for many of the raw materials we use, including copper, gold, and silver. In fiscal 2019, we purchased approximately 172 million pounds of copper, 122,000 troy ounces of gold, and 2.6 million troy ounces of silver. The following table presents the average prices incurred related to copper, gold, and silver:

	Measure	Fiscal	
		2019	2018
Copper	Lb.	\$ 2.93	\$ 2.86
Gold	Troy oz.	1,309	1,281
Silver	Troy oz.	16.42	17.15

In fiscal 2020, we expect to purchase approximately 170 million pounds of copper, 120,000 troy ounces of gold, and 2.4 million troy ounces of silver.

Operating Expenses

The following table presents operating expense information:

	Fiscal		Change
	2019	2018	
	(\$ in millions)		
Selling, general, and administrative expenses	\$ 1,490	\$ 1,594	\$ (104)
As a percentage of net sales	11.1 %	11.4 %	
Restructuring and other charges, net	255	126	129

Selling, General, and Administrative Expenses. In fiscal 2019, selling, general, and administrative expenses decreased \$104 million as compared to fiscal 2018 due primarily to lower incentive compensation costs as well as cost control measures and savings attributable to restructuring actions. Selling, general, and administrative expenses as a percentage of net sales decreased to 11.1% in fiscal 2019 from 11.4% in fiscal 2018.

Restructuring and Other Charges, Net. We are committed to continuous productivity improvements, and we evaluate opportunities to simplify our global manufacturing footprint, migrate facilities to lower-cost regions, reduce fixed costs, and eliminate excess capacity. These initiatives are designed to help us maintain our competitiveness in the industry, improve our operating leverage, and position us for future growth.