The measurement of benefit obligations and net periodic cost/ (income) is based on estimates and assumptions approved by the company's management. These valuations reflect the terms of the plans and use participant-specific information such as compensation, age and years of service, as well as certain assumptions, including estimates of discount rates, expected return on plan assets, rate of compensation increases, interest crediting rates and mortality rates.

Defined Contribution Plans

The company's contribution for defined contribution plans is recorded when the employee renders service to the company. The charge is recorded in Cost, SG&A and RD&E in the Consolidated Income Statement based on the employees' respective functions.

Stock-Based Compensation

Stock-based compensation represents the cost related to stockbased awards granted to employees. The company measures stock-based compensation cost at the grant date, based on the estimated fair value of the award and recognizes the cost on a straight-line basis (net of estimated forfeitures) over the employee requisite service period. The company grants its employees Restricted Stock Units (RSUs), including Retention Restricted Stock Units (RRSUs); Performance Share Units (PSUs); and periodically grants stock options. RSUs are stock awards granted to employees that entitle the holder to shares of common stock as the award vests, typically over a one- to five-year period. PSUs are stock awards where the number of shares ultimately received by the employee depends on the company's performance against specified targets and typically vest over a three-year period. Over the performance period, the number of shares that will be issued is adjusted based upon the probability of achievement of performance targets. The ultimate number of shares issued and the related compensation cost recognized as expense will be based on a comparison of the final performance metrics to the specified targets. Dividend equivalents are not paid on the stock awards described above. The fair value of the awards is determined and fixed on the grant date based on the company's stock price, adjusted for the exclusion of dividend equivalents where applicable and for PSUs assumes that performance targets will be achieved. The company estimates the fair value of stock options using a Black-Scholes valuation model. Stock-based compensation cost is recorded in Cost, SG&A, and RD&E in the Consolidated Income Statement based on the employees' respective functions.

The company records deferred tax assets for awards that result in deductions on the company's income tax returns, based on the amount of compensation cost recognized and the relevant statutory tax rates. The differences between the deferred tax assets recognized for financial reporting purposes and the actual tax deduction reported on the income tax return are recorded as a benefit or expense to the provision for income taxes in the Consolidated Income Statement.

Income Taxes

Income tax expense is based on reported income before income taxes. Deferred income taxes reflect the tax effect of temporary differences between asset and liability amounts that are recognized for financial reporting purposes and the amounts that are recognized for income tax purposes. These deferred taxes are measured by applying currently enacted tax laws. Valuation allowances are recognized to reduce deferred tax assets to the amount that will more likely than not be realized. In assessing the need for a valuation allowance, management considers all available evidence for each jurisdiction including past operating results, estimates of future taxable income and the feasibility of ongoing tax planning strategies/actions. When the company changes its determination as to the amount of deferred tax assets that can be realized, the valuation allowance is adjusted with a corresponding impact to income tax expense in the period in which such determination is made.

The company recognizes additional tax liabilities when the company believes that certain positions may not be fully sustained upon review by tax authorities. Benefits from tax positions are measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon settlement. The noncurrent portion of tax liabilities is included in other liabilities in the Consolidated Balance Sheet. To the extent that new information becomes available which causes the company to change its judgment regarding the adequacy of existing tax liabilities, such changes to tax liabilities will impact income tax expense in the period in which such determination is made. Interest and penalties, if any, related to accrued liabilities for potential tax assessments are included in income tax expense.

U.S. tax reform introduced Global Intangible Low-Taxed Income (GILTI), which subjects a U.S. shareholder to current tax on income earned by certain foreign subsidiaries. Beginning in 2018, the company elected to include GILTI in measuring deferred taxes.

Translation of Non-U.S. Currency Amounts

Assets and liabilities of non-U.S. subsidiaries that have a local functional currency are translated to U.S. dollars at year-end exchange rates. Translation adjustments are recorded in OCI. Income and expense items are translated at weighted-average rates of exchange prevailing during the year.

Inventory, property, plant and equipment—net and other non-monetary assets and liabilities of non-U.S. subsidiaries and branches that operate in U.S. dollars are translated at the approximate exchange rates prevailing when the company acquired the assets or liabilities. All other assets and liabilities denominated in a currency other than U.S. dollars are translated at year-end exchange rates with the transaction gain or loss recognized in other (income) and expense. Income and expense items are translated at the weighted-average rates of exchange prevailing during the year. These translation gains and losses are included in net income for the period in which exchange rates change.