

billion to goodwill and indefinite-lived intangible assets, respectively. These assets are tested for impairment at least annually, using estimates and assumptions affected by factors such as economic and industry conditions and changes in operating performance. Additionally, in conjunction with the brand impairment tests, we also reassess each brand's indefinite-life classification. Potential resulting charges from an impairment of goodwill or brand intangible, as well as reclassification of an indefinite-lived to a definite-lived brand intangible, could have a material adverse effect on our results of operations. For example, the results of our annual impairment testing completed as of October 1, 2016, indicated that the fair value of the *Molson* core brand indefinite-lived intangible asset was below its carrying value. As a result, we recorded an impairment charge of \$495.2 million recorded within special items in our consolidated statements of operations during the fourth quarter of 2016. Additionally, during this review, we also reassessed the asset's indefinite-life classification and determined that the *Molson* core brands have characteristics that have evolved which now indicate a definite-life is more appropriate. These brands were therefore reclassified as definite-lived intangible assets and are being amortized over useful lives ranging from 30 to 50 years.

Our most recent impairment analysis, conducted as of October 1, 2018, the first day of our fiscal fourth quarter, indicated that the fair value of the U.S., Europe and Canada reporting units were estimated at approximately 19%, 11% and 6% in excess of their carrying values, respectively. In the current year testing, it was determined that the fair value of each of the reporting units declined from the prior year, resulting in our Europe and Canada reporting units now being considered at risk of future impairment in the event of significant unfavorable changes in the forecasted cash flows (including prolonged weakening of economic conditions, or significant unfavorable changes in tax, environmental or other regulations, including interpretations thereof), terminal growth rates, market multiples and/or weighted-average cost of capital utilized in the discounted cash flow analyses. Although the fair values of our reporting units are in excess of their carrying values, the fair values are sensitive to the aforementioned potential unfavorable changes that could have an adverse impact on future analyses. Any future impairment of the U.S., Europe or Canada reporting units or brands, or reclassification of indefinite-lived brands to definite-lived, may result in material charges that could have a material adverse effect on our business and financial results. Additionally, if the on-going integration of the MillerCoors and Miller International Business is unsuccessful due to, for example, unexpected challenges or difficulties, or adverse economic, market or industry conditions, material impairment charges may be incurred in the future. The testing of our goodwill for impairment is predicated upon our determination of our reporting units. Any change to the conclusion of our reporting units or the aggregation of components within our reporting units could result in a different outcome to our annual impairment test. See Part II-Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations, Critical Accounting Estimates and Part II-Item 8 Financial Statements and Supplementary Data, [Note 10, "Goodwill and Intangible Assets"](#) of the Notes for additional information related to the results of our annual impairment testing.

Termination of one or more manufacturer/distribution agreements could have a material adverse effect on our business and financial results. We manufacture and/or distribute products of other beverage companies through various joint venture, licensing, distribution, contract brewing or other similar arrangements, such as our agreement to import, market, distribute and sell Heineken in Canada and our arrangements to brew and distribute *Beck's*, *Stella Artois*, *Lowenbrau* and *Spaten* and to distribute *Corona* in Central Europe. Our inability to renew or the loss of one or more of these arrangements, as a result of industry consolidation or otherwise, could have a material adverse effect on our business and financial results. For example, in 2017, our International segment was adversely impacted by the loss of the *Modelo* brands in Japan.

Changes in various supply chain standards or agreements could have a material adverse effect on our business and financial results. Our business includes various joint venture and industry agreements which standardize parts of the supply chain system. An example includes our warehousing and customer delivery systems in Canada organized under joint venture agreements with other brewers. Any negative change in these agreements or material terms within these agreements could have a material adverse effect on our business and financial results.

We rely on a small number of suppliers to obtain the packaging materials we need to operate our business. The inability to obtain materials could unfavorably affect our ability to produce our products which could have a material adverse effect on our business and financial results. We purchase certain types of packaging materials including aluminum cans and bottles, glass bottles and paperboard from a small number of suppliers. Consolidation of packaging materials suppliers has reduced local supply alternatives and increased risks of supply disruptions. The inability of any of these suppliers to meet our production requirements without sufficient time to develop an alternative source could have a material adverse effect on our business and financial results. Additionally, if the financial condition of these suppliers deteriorates our business and financial results could be adversely impacted. Our suppliers' financial condition is affected in large part by conditions and events that are beyond our and their control, including: competitive and general market conditions in the locations in which they operate; the availability of capital and other financing resources on reasonable terms; loss of major customers; or disruptions of bottling operations that may be caused by strikes, work stoppages, labor unrest or natural disasters. A deterioration of the financial condition or results of operations of one or more of our major suppliers could adversely affect our business and financial results.