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International Business Machines Corporation and Subsidiary Companies

cost impact the prices charged to clients. We also maintain currency hedging programs for cash management purposes which may temporarily mitigate, but not eliminate, the volatility of currency impacts on our financial results.

We translate revenue, cost and expense in our non-U.S. operations at current exchange rates in the reported period. References to “adjusted for currency” or “constant currency” reflect adjustments based upon a simple mathematical formula. However, this constant currency methodology that we utilize to disclose this information does not incorporate any operational actions that management could take to mitigate fluctuating currency rates. Currency movements impacted our year-to-year revenue and earnings per share growth in 2020. Based on the currency rate movements in 2020, total revenue decreased 4.6 percent as reported and 4.7 percent at constant currency versus 2019. On an income from continuing operations before income taxes basis, these translation impacts offset by the net impact of hedging activities resulted in a theoretical maximum (assuming no pricing or sourcing actions) increase of approximately \$280 million in 2020 on an as-reported basis and an increase of approximately \$290 million on an operating (non-GAAP) basis. The same mathematical exercise resulted in an increase of approximately \$300 million in 2019 on an as-reported basis and an increase of \$260 million on an operating (non-GAAP) basis. We view these amounts as a theoretical maximum impact to our as-reported financial results. Considering the operational responses mentioned above, movements of exchange rates, and the nature and timing of hedging instruments, it is difficult to predict future currency impacts on any particular period, but we believe it could be substantially less than the theoretical maximum given the competitive pressure in the marketplace.

For non-U.S. subsidiaries and branches that operate in U.S. dollars or whose economic environment is highly inflationary, translation adjustments are reflected in results of operations. Generally, we manage currency risk in these entities by linking prices and contracts to U.S. dollars.

During 2018, the three-year cumulative inflation rates in Argentina, using a combination of monthly indices, exceeded the 100 percent threshold for hyperinflation. As a result, effective July 1, 2018, the company changed the functional currency from local currency to U.S. dollar functional for Argentina with no material impact. In 2019 and 2020, the Argentinean economy continued to experience high inflation. The ongoing impact is not material given the size of the company’s operations in the country (less than 1 percent of total 2020 and 2019 revenue, respectively).

Market Risk

In the normal course of business, our financial position is routinely subject to a variety of risks. In addition to the market risk associated with interest rate and currency movements on outstanding debt and non-U.S. dollar denominated assets and liabilities, other examples of risk include collectibility of accounts receivable and recoverability of residual values on leased assets.

We regularly assess these risks and have established policies and business practices to protect against the adverse effects of these and other potential exposures. As a result, we do not anticipate any material losses from these risks.

Our debt, in support of the Global Financing business and the geographic breadth of our operations, contains an element of market risk from changes in interest and currency rates. We manage this risk, in part, through the use of a variety of financial instruments including derivatives, as described in note T, “Derivative Financial Instruments.”

To meet disclosure requirements, we perform a sensitivity analysis to determine the effects that market risk exposures may have on the fair values of our debt and other financial instruments.

The financial instruments that are included in the sensitivity analysis are comprised of our cash and cash equivalents, marketable securities, short-term and long-term loans, commercial financing and installment payment receivables, investments, long-term and short-term debt and derivative financial instruments. Our derivative financial instruments generally include interest rate swaps, foreign currency swaps and forward contracts.

To perform the sensitivity analysis, we assess the risk of loss in fair values from the effect of hypothetical changes in interest rates and foreign currency exchange rates on market-sensitive instruments. The market values for interest and foreign currency exchange risk are computed based on