BMS may hedge a portion of its future foreign currency exposure by utilizing a strategy that involves both a purchased local currency put option and a written local currency call option that are accounted for as hedges of future sales denominated in that local currency. Specifically, BMS sells (or writes) a local currency call option and purchases a local currency put option with the same expiration dates and local currency notional amounts but with different strike prices. The premium collected from the sale of the call option is equal to the premium paid for the purchased put option, resulting in no net premium being paid. This combination of transactions is generally referred to as a "zero-cost collar." The expiration dates and notional amounts correspond to the amount and timing of forecasted foreign currency sales. The foreign currency zero-cost collar contracts outstanding as of December 31, 2019 had settlement dates within 12 months. If the U.S. Dollar weakens relative to the currency of the hedged anticipated sales, the purchased put option value reduces to zero and we benefit from the increase in the U.S. Dollar equivalent value of our anticipated foreign currency cash flows; however, this benefit would be capped at the strike level of the written call, which forms the upper end of the collar.

*Net Investment Hedges* — Non-U.S. dollar borrowings of €950 million ($1.1 billion) at December 31, 2019 are designated as net investment hedges to hedge euro currency exposures of the net investment in certain foreign affiliates and are recognized in long-term debt. The effective portion of foreign exchange gain on the remeasurement of euro debt was included in the foreign currency translation component of Accumulated other comprehensive loss with the related offset in long-term debt.

In January 2018, $300 million of cross-currency interest rate swap contracts maturing in December 2022 were entered into and designated to hedge Japanese yen currency exposures of BMS's net investment in its Japan subsidiary. Contract fair value changes are recorded in the foreign currency translation component of Other Comprehensive Income/(Loss) with a related offset in Other non-current assets or Other non-current liabilities.

*Fair Value Hedges* — Fixed to floating interest rate swap contracts are designated as fair value hedges and used as an interest rate risk management strategy to create an appropriate balance of fixed and floating rate debt. The contracts and underlying debt for the hedged benchmark risk are recorded at fair value. The effective interest rate for the contracts is one-month LIBOR (1.8% as of December 31, 2019) plus an interest rate spread of 4.6%. Gains or losses resulting from changes in fair value of the underlying debt attributable to the hedged benchmark interest rate risk are recorded in interest expense with an associated offset to the carrying value of debt. Since the specific terms and notional amount of the swap are intended to align with the debt being hedged, all changes in fair value of the swap are recorded in interest expense with an associated offset to the derivative asset or liability on the consolidated balance sheet. As a result, there was no net impact in earnings. When the underlying swap is terminated prior to maturity, the fair value adjustment to the underlying debt is amortized as a reduction to interest expense over the remaining term of the debt.

Following the announcement of the Celgene acquisition, forward starting interest rate swap option contracts were entered into with a total notional value of $7.6 billion to hedge future interest rate risk associated with the anticipated issuance of long-term debt to fund the acquisition. In April 2019, deal contingent forward starting interest rate swap contracts were entered into, with an aggregate notional principal amount of $10.4 billion to hedge interest rate risk associated with the anticipated issuance of long-term debt to fund the acquisition and the forward starting interest rate swap option contracts were terminated. The deal contingent forward starting interest rate swap contracts were terminated upon the completion of the Celgene acquisition.

The following summarizes the fair value of outstanding derivatives:

| | December 31, 2019 | | | | December 31, 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| | Asset[(a)] | | Liability[(b)] | | Asset[(a)] | | Liability[(b)] | |
| Dollars in Millions | Notional | Fair Value | Notional | Fair Value | Notional | Fair Value | Notional | Fair Value |
| Derivatives designated as hedging instruments: | | | | | | | | |
| Interest rate swap contracts | $ 255 | $ 6 | $ — | $ — | $ — | $ — | $ 755 | $ (10) |
| Cross-currency interest rate swap contracts | 175 | 2 | 125 | (1) | 50 | — | 250 | (5) |
| Foreign currency forward contracts | 766 | 27 | 980 | (20) | 1,503 | 44 | 496 | (10) |
| Derivatives not designated as hedging instruments: | | | | | | | | |
| Foreign currency forward contracts | 2,342 | 91 | 1,173 | (10) | 54 | — | 600 | (6) |
| Foreign currency zero-cost collar contracts | 2,482 | 14 | 2,235 | (9) | — | — | — | — |

(a) Included in Other current assets and Other non-current assets.
(b) Included in Other current liabilities and Other non-current liabilities.