

Management's discussion and analysis

Credit ratings

The cost and availability of financing are influenced by credit ratings. Reductions in these ratings could have an adverse effect on the Firm's access to liquidity sources, increase the cost of funds, trigger additional collateral or funding requirements and decrease the number of investors and counterparties willing to lend to the Firm. Additionally, the Firm's funding requirements for VIEs and other third-

party commitments may be adversely affected by a decline in credit ratings. For additional information on the impact of a credit ratings downgrade on the funding requirements for VIEs, and on derivatives and collateral agreements, refer to SPEs on page 55, and liquidity risk and credit-related contingent features in Note 5.

The credit ratings of the Parent Company and the Firm's principal bank and non-bank subsidiaries as of December 31, 2018, were as follows.

December 31, 2018	JPMorgan Chase & Co.			JPMorgan Chase Bank, N.A. Chase Bank USA, N.A.			J.P. Morgan Securities LLC J.P. Morgan Securities plc		
	Long-term issuer	Short-term issuer	Outlook	Long-term issuer	Short-term issuer	Outlook	Long-term issuer	Short-term issuer	Outlook
Moody's Investors Service	A2	P-1	Stable	Aa2	P-1	Stable	Aa3	P-1	Stable
Standard & Poor's	A-	A-2	Stable	A+	A-1	Stable	A+	A-1	Stable
Fitch Ratings	AA-	F1+	Stable	AA	F1+	Stable	AA	F1+	Stable

On October 25, 2018, Moody's upgraded the Parent Company's long-term issuer rating to A2 (previously A3) and short-term issuer rating to P-1 (previously P-2). The long-term issuer ratings were also upgraded for JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A. to Aa2 (previously Aa3), and for J.P. Morgan Securities LLC and J.P. Morgan Securities plc to Aa3 (previously A1).

On June 21, 2018, Fitch upgraded the Parent Company's long-term issuer rating to AA- (previously A+) and short-term issuer rating to F1+ (previously F1). The long-term issuer ratings were also upgraded to AA for JPMorgan Chase Bank, N.A, Chase Bank USA, N.A., J.P. Morgan Securities LLC and J.P. Morgan Securities plc (all previously AA-).

Downgrades of the Firm's long-term ratings by one or two notches could result in an increase in its cost of funds, and access to certain funding markets could be reduced. The nature and magnitude of the impact of ratings downgrades depends on numerous contractual and behavioral factors which the Firm believes are incorporated in its liquidity risk and stress testing metrics. The Firm believes that it

maintains sufficient liquidity to withstand a potential decrease in funding capacity due to ratings downgrades.

JPMorgan Chase's unsecured debt does not contain requirements that would call for an acceleration of payments, maturities or changes in the structure of the existing debt, provide any limitations on future borrowings or require additional collateral, based on unfavorable changes in the Firm's credit ratings, financial ratios, earnings, or stock price.

Critical factors in maintaining high credit ratings include a stable and diverse earnings stream, strong capital and liquidity ratios, strong credit quality and risk management controls, and diverse funding sources. Rating agencies continue to evaluate economic and geopolitical trends, regulatory developments, future profitability, risk management practices, and litigation matters, as well as their broader ratings methodologies. Changes in any of these factors could lead to changes in the Firm's credit ratings.