

Credit derivatives

Refer to Note 5 of JPMorgan Chase's 2020 Form 10-K for a more detailed discussion of credit derivatives. The following tables present a summary of the notional amounts of credit derivatives and credit-related notes the Firm sold and purchased as of March 31, 2021 and December 31, 2020. The Firm does not use notional amounts of credit derivatives as the primary measure of risk management for such derivatives, because the notional amount does not take into account the probability of the occurrence of a credit event, the recovery value of the reference obligation, or related cash instruments and economic hedges, each of which reduces, in the Firm's view, the risks associated with such derivatives.

Total credit derivatives and credit-related notes

March 31, 2021 (in millions)	Maximum payout/Notional amount			
	Protection sold	Protection purchased with identical underlyings ^(b)	Net protection (sold)/purchased ^(c)	Other protection purchased ^(d)
Credit derivatives				
Credit default swaps	\$ (595,343)	\$ 609,926	\$ 14,583	\$ 2,562
Other credit derivatives ^(a)	(45,961)	68,528	22,567	12,478
Total credit derivatives	(641,304)	678,454	37,150	15,040
Credit-related notes	—	—	—	10,847
Total	\$ (641,304)	\$ 678,454	\$ 37,150	\$ 25,887

December 31, 2020 (in millions)	Maximum payout/Notional amount			
	Protection sold	Protection purchased with identical underlyings ^(b)	Net protection (sold)/purchased ^(c)	Other protection purchased ^(d)
Credit derivatives				
Credit default swaps	\$ (535,094)	\$ 554,565	\$ 19,471	\$ 4,001
Other credit derivatives ^(a)	(40,084)	57,344	17,260	9,415
Total credit derivatives	(575,178)	611,909	36,731	13,416
Credit-related notes	—	—	—	10,248
Total	\$ (575,178)	\$ 611,909	\$ 36,731	\$ 23,664

(a) Other credit derivatives predominantly consist of credit swap options and total return swaps.

(b) Represents the total notional amount of protection purchased where the underlying reference instrument is identical to the reference instrument on protection sold; the notional amount of protection purchased for each individual identical underlying reference instrument may be greater or lower than the notional amount of protection sold.

(c) Does not take into account the fair value of the reference obligation at the time of settlement, which would generally reduce the amount the seller of protection pays to the buyer of protection in determining settlement value.

(d) Represents protection purchased by the Firm on referenced instruments (single-name, portfolio or index) where the Firm has not sold any protection on the identical reference instrument.

The following tables summarize the notional amounts by the ratings, maturity profile, and total fair value, of credit derivatives and credit-related notes as of March 31, 2021, and December 31, 2020, where JPMorgan Chase is the seller of protection. The maturity profile is based on the remaining contractual maturity of the credit derivative contracts. The ratings profile is based on the rating of the reference entity on which the credit derivative contract is based. The ratings and maturity profile of credit derivatives and credit-related notes where JPMorgan Chase is the purchaser of protection are comparable to the profile reflected below.

Protection sold – credit derivatives and credit-related notes ratings^(a)/maturity profile

March 31, 2021 (in millions)	<1 year	1–5 years	>5 years	Total notional amount	Fair value of receivables ^(b)	Fair value of payables ^(b)	Net fair value
Risk rating of reference entity							
Investment-grade	\$ (93,329)	\$ (304,945)	\$ (80,813)	\$ (479,087)	\$ 5,746	\$ (651)	\$ 5,095
Noninvestment-grade	(35,229)	(100,052)	(26,936)	(162,217)	3,851	(2,418)	1,433
Total	\$ (128,558)	\$ (404,997)	\$ (107,749)	\$ (641,304)	\$ 9,597	\$ (3,069)	\$ 6,528
December 31, 2020 (in millions)	<1 year	1–5 years	>5 years	Total notional amount	Fair value of receivables ^(b)	Fair value of payables ^(b)	Net fair value
Risk rating of reference entity							
Investment-grade	\$ (93,905)	\$ (307,648)	\$ (35,326)	\$ (436,879)	\$ 5,521	\$ (835)	\$ 4,686
Noninvestment-grade	(31,809)	(97,337)	(9,153)	(138,299)	3,953	(2,542)	1,411
Total	\$ (125,714)	\$ (404,985)	\$ (44,479)	\$ (575,178)	\$ 9,474	\$ (3,377)	\$ 6,097

(a) The ratings scale is primarily based on external credit ratings defined by S&P and Moody's.

(b) Amounts are shown on a gross basis, before the benefit of legally enforceable master netting agreements including cash collateral netting.