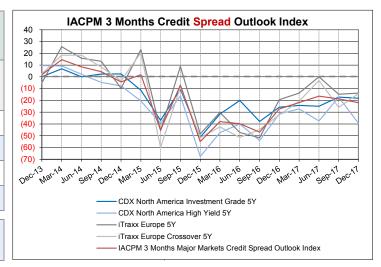


Fourth Quarter 2017 Credit Outlook

Expected direction Credit Spreads will move over the course of the next 3 months											
Percent of total respondents selecting the option.	Up (widen)	Unchanged	Down (narrow)	IACPM 3 Months Credit Spread Outlook Index (positive numbers indicate credit improvement)							
selecting the option.	Dec-17	Dec-17	Dec-17	Dec-17	Sep-17	Jun-17	Mar-17	Dec-16			
CDX North America Investment Grade 5Y	42%	33%	24%	(18.2)	(17.2)	(25.0)	(24.2)	(25.7)			
CDX North America High Yield 5Y	58%	24%	18%	(39.4)	(17.2)	(37.5)	(27.3)	(31.4)			
iTraxx Europe 5Y	38%	38%	24%	(13.8)	(14.8)	0.0	(13.8)	(19.4)			
iTraxx Europe Crossover 5Y	43%	29%	28%	(14.3)	(25.9)	(3.1)	(20.7)	(32.3)			

IACPM 3 Months Major Markets Credit Spread Outlook Index (weighted average based on number of responses)	(22.0)	(18.8)	(16.4)	(21.8)	(27.3)
--	--------	--------	--------	--------	--------



Expected direction Credit Default Rates will move over the course of the next 12 months (annual twelve month trailing) **IACPM 12 Months Credit Default Outlook Index** Up Unchanged Down Percent of total respondents (positive numbers indicate credit improvement) selecting the option. Dec-17 Dec-17 Dec-17 Dec-17 Sep-17 Jun-17 Mar-17 Dec-16 Average Corporate 40% 43% 16% (24.0)(33.9)(31.1)(28.9)(29.6)North America Corporate 44% 38% 18% (26.5)(41.7)(41.2)(20.0)(13.9)**Europe Corporate** 32% 44% 24% (8.8)(21.9)(30.3)(38.9)(33.3)Asia Corporate 47% 47% 5% (42.1)(47.8)(27.3)(37.5)(58.8)Australia Corporate 41% 47% 12% (29.4)(22.2)(17.6)(19.0)(26.7)12% Average Retail/ Consumer Mortgage 50% 38% (38.3)(42.3)(41.1)(33.6)(41.3)Average Commercial Real Estate 41% 48% 11% (29.2)(34.0)(41.3)(31.5)(43.5)**IACPM Aggregate Credit Default Outlook Index** (30.3)(36.3)(38.0)(37.9)(31.3)(weighted average based on number of responses)

