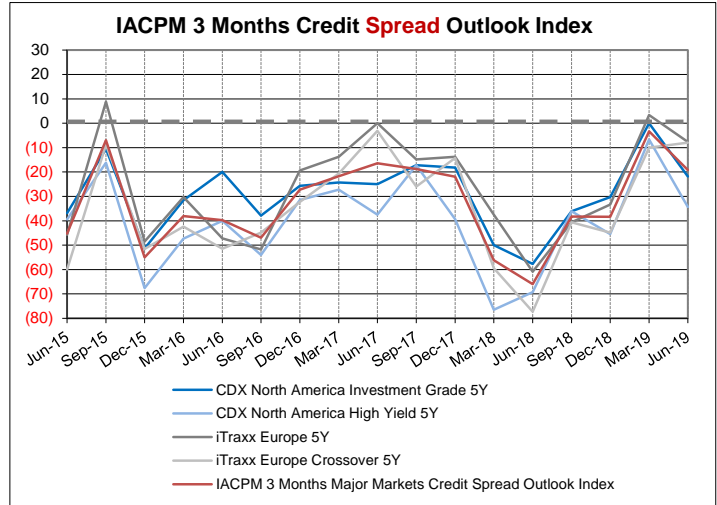


### Expected direction Credit Spreads will move over the course of the next 3 months

| Percent of total respondents selecting the option. | Up (widen) | Unchanged | Down (narrow) | IACPM 3 Months Credit Spread Outlook Index<br><i>(positive numbers indicate credit improvement)</i> |        |        |        |        |
|--|------------|-----------|---------------|---|--------|--------|--------|--------|
|  | Jun-19     | Jun-19    | Jun-19        | Jun-19  | Mar-19 | Dec-18 | Sep-18 | Jun-18 |
| CDX North America Investment Grade 5Y              | 41%        | 41%       | 19%           | (21.9)  | 0.0    | (30.3) | (36.1) | (57.7) |
| CDX North America High Yield 5Y                    | 56%        | 22%       | 22%           | (34.4)  | (6.7)  | (45.5) | (36.1) | (69.2) |
| iTraxx Europe 5Y                                   | 27%        | 54%       | 19%           | (7.7)   | 3.3    | (33.3) | (40.6) | (60.9) |
| iTraxx Europe Crossover 5Y                         | 36%        | 36%       | 28%           | (8.0)   | (10.0) | (44.8) | (40.6) | (77.3) |

| IACPM 3 Months Major Markets Credit Spread Outlook Index<br><i>(weighted average based on number of responses)</i> | (19.1) | (3.3) | (38.4) | (38.2) | (66.0) |
|--|--------|-------|--------|--------|--------|
|--|--------|-------|--------|--------|--------|



### Expected direction Credit Default Rates will move over the course of the next 12 months

*(annual twelve month trailing)*

| Percent of total respondents selecting the option. | Up     | Unchanged | Down   | IACPM 12 Months Credit Default Outlook Index<br><i>(positive numbers indicate credit improvement)</i> |        |        |        |        |
|--|--------|-----------|--------|---|--------|--------|--------|--------|
|  | Jun-19 | Jun-19    | Jun-19 | Jun-19  | Mar-19 | Dec-18 | Sep-18 | Jun-18 |
| Average Corporate                                  | 58%    | 32%       | 9%     | (49.1)  | (50.0) | (72.3) | (49.5) | (55.9) |
| North America Corporate                            | 65%    | 30%       | 5%     | (59.5)  | (50.0) | (75.7) | (43.2) | (65.5) |
| Europe Corporate                                   | 52%    | 39%       | 9%     | (42.4)  | (47.2) | (73.5) | (56.3) | (55.6) |
| Asia Corporate                                     | 62%    | 24%       | 14%    | (47.6)  | (52.2) | (78.3) | (59.1) | (52.2) |
| Australia Corporate                                | 53%    | 33%       | 13%    | (40.0)  | (52.4) | (55.6) | (38.9) | (42.9) |
| Average Retail/ Consumer Mortgage                  | 61%    | 31%       | 9%     | (52.1)  | (59.8) | (71.0) | (47.1) | (50.6) |
| Average Commercial Real Estate                     | 46%    | 42%       | 12%    | (34.4)  | (58.0) | (69.7) | (44.7) | (46.4) |

| IACPM Aggregate Credit Default Outlook Index<br><i>(weighted average based on number of responses)</i> | (45.4) | (55.7) | (71.1) | (47.2) | (51.1) |
|--|--------|--------|--------|--------|--------|
|--|--------|--------|--------|--------|--------|

### IACPM 12 Months Corporate Credit Default Outlook Index

