

# IPE SURVEY HIGH YIELD MANAGERS

| Company   | Aberdeen Standard Inv. | Achmea Inv. Management | Aegon Asset Management | Alcentra | AllianceBernstein    | Allianz Global Investors | Amundi    | Assenagon Asset Mngt. | Aviva Investors | AXA Investment Managers | Baillie Gifford     | Barings              | BlackRock | BlueBay Asset Management | Candriam            | Capital Four Management | Columbia Threadneedle Inv. |
|---|------------------------|------------------------|------------------------|----------|----------------------|--------------------------|-----------|-----------------------|-----------------|-------------------------|---------------------|----------------------|-----------|--------------------------|---------------------|-------------------------|----------------------------|
| As at   | 31/12/17               | 31/12/17               | 31/12/17               | 31/12/17 | 31/12/17             | 20/02/18                 | 31/12/17  | 31/01/18              | 30/09/17        | 31/12/17                | 31/12/17            | 31/12/17             | 31/12/17  | 31/12/17                 | 31/12/17            | 31/01/18                | 31/12/17                   |
| Total assets invested in high yield bond strategies (€m)        | 4,227.1                | 2,353                  | 14,080                 | 2,636    | 6,461                | 800                      | 19,369    | 818                   | 5,265           | 20,326                  | 694.58              | 9,833                | 61,079    | 5,408                    | 7,429               | 7,717                   | 17,122                     |
| Total assets invested in high yield bonds overall               | 6,234.4                | 2,353                  | 14,080                 | 2,636    | 28,679               | 1,500                    | 20,221    |                       |                 | NA                      | 2,203.51            | 11,666               | 103,178   | 5,615                    | 9,569               | 7,938                   | 20,610                     |
| Total group assets under management worldwide                   | 648,532.2              | 119,554                | 318,078                | 29,756   | 461,768              | 500,000                  | 1,426,107 | 22,651                | 399,660         | 745,912                 | 202,330.92          | 253,831              | 5,236,671 | 49,784                   | 112,555             | 9,808                   | 412,000                    |
| Total assets in fixed income worldwide                          | 122,002.6              | 62,509                 | 237,188                | 29,756   | 231,711              | 240,000                  | 645,763   | 1,707                 | 249,533         | 435,997                 | 7,352.29            | 212,559              | 1,147,570 | 49,784                   | 55,669              | 9,808                   | 151,564                    |
| <b>Assets invested in high yield bond strategies (€m)</b>       |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| <b>Vehicle type</b>   |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| Segregated account mandates                                     | 1,028.8                | 2,353                  |                        | 997      | 2,181                | 480                      |           | 280                   | 111             | 3,764                   | 117.22              | 7,257                | 12,718    | 3,818                    | 725                 | 1,905                   | 11,532                     |
| Pooled funds  | 3,144.3                | 0                      |                        | 1,639    | 4,280                | 320                      |           | 538                   | 5,154           | 16,562                  | 577.36              | 2,576                | 48,361    | 1,590                    | 6,704               | 5,812                   | 5,590                      |
| <b>Client type</b>  |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| Institutional clients worldwide                                 | 2,390.3                | 2,353                  | 14,080                 | 744      | 4,427                | 480                      |           | 818                   | 3,999           | 10,473                  | 236.07              | 8,089                | 9,801     | 4,290                    | 7,932               | 6,297                   | 11,532                     |
| Europe-based institutional clients                              | 2,149.9                | 2,353                  | 5,914                  | 308      | 1,876                | 180                      |           | 818                   | 3,239           | 9,322                   | 231.5               | 1,756                | 4,381     | 941                      | 4,733               | 6,101                   | 5,996                      |
| Europe-based pension fund clients                               | 303                    | 2,353                  |                        | 131      | 923                  |                          |           |                       | NA              | 359                     | 227.99              | 1,078                | 1,533     | 754                      | 507                 | 3,165                   | 864                        |
| Europe-based insurance company clients                          | 833.5                  |                        |                        | 104      | 941                  |                          |           |                       | NA              | 1,781                   | 0                   | 525                  | 517       | 20                       | 955                 | 775                     | 104                        |
| All other Europe-based institutional clients                    | 1,013.4                |                        |                        | 73       | 12                   | 180                      |           |                       | 3,239           | 7,182                   | 3.51                | 153                  | 2,331     | 167                      | 3,271               | 2,161                   | 5,028                      |
| <b>Location of issuance</b>                                     |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| Europe  | 2,082                  | 471                    |                        | 278      |                      | 215                      |           |                       | 1,118           | 3,903                   | 467.63              | 2,055 <sup>(8)</sup> | 7,060     |                          | 4,456.14            | 5,879                   |                            |
| US  | 1,797.5                | 1,882                  |                        | 2,052    |                      | 465                      |           |                       | 3,576           | 16,392                  | 147.04              | 7,477                | 46,969    |                          | 2,346.61            | 1,697                   |                            |
| Other issues  | 347.6 <sup>(11)</sup>  |                        |                        | 306      |                      | 120                      |           |                       | 571             | 31                      | 50.36               | 154                  | 7,050     |                          | 626.5               | 141                     |                            |
| <b>Currency of issue</b>  |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| Euro-denominated bonds  | 1,378.6                | 402                    |                        |          |                      | 225                      |           |                       | 636             | 5,418                   | 350.03              | 1,086 <sup>(8)</sup> | 3,519     |                          | 5,086.32            | 5,782                   | 4,466                      |
| Dollar-denominated bonds  | 1,968.4                | 1,872                  |                        |          |                      | 495                      |           |                       | 4,226           | 13,567                  | 142.5               | 6,946                | 57,150    |                          | 1,962.85            | 23                      | 12,523                     |
| Sterling-denominated bonds                                      | 868.6                  | 69                     |                        |          |                      | 80                       |           |                       | 401             | 1,317                   | 167.88              | 790                  | 406       |                          | 142.62              | 1,688                   | 103                        |
| Other-denominated bonds   | 11.5                   | 10                     |                        |          |                      |                          |           |                       | 0.5             | 24                      | 4.62                | 864                  | 4         |                          | 237.46              | 224                     | 30                         |
| <b>Amount held within rating</b>                                |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| BBB-B   | 3,779.1                | 1,979                  |                        |          |                      | 700                      |           | 818                   |                 | 16,792.8                | 645.19              |                      | 58,292    |                          | 7,003.57            | 6,690                   |                            |
| CCC-C   | 283.7                  | 374                    |                        |          |                      | 90                       |           |                       |                 | 2,139.2                 | 13.17               |                      | 2,459     |                          | 199.12              | 679                     |                            |
| Unrated   | 164.3 <sup>(11)</sup>  | 0                      |                        |          |                      | 10                       |           |                       |                 | 225.7                   | 6.66                |                      | 80        |                          | 226.56              | 223                     |                            |
| <b>Active/passive/unconstrained</b>                             |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| Passive   |                        |                        |                        |          |                      | 0                        |           |                       |                 | 0                       |                     |                      | 27,029    |                          |                     |                         |                            |
| ETFs  |                        |                        |                        |          |                      | 0                        |           |                       |                 | 0                       |                     |                      | 23,259    |                          |                     |                         |                            |
| Benchmarked active  | 3,588.3                | 2,353                  |                        | 2,636    |                      | 400                      |           |                       | 5,265           | 4,523.3                 | 694.58              | 7,453                | 51,229    | 5,347                    | 3,093               | 7,717                   | 17,122                     |
| Benchmarked against an enhanced/alternatively-weighted index    |                        |                        |                        |          |                      | 0                        |           |                       |                 | 0                       |                     |                      | 2,174     |                          |                     |                         |                            |
| Managed against a customised benchmark or risk/return target    | 638.8                  |                        |                        |          |                      | 0                        |           | 818                   |                 | 0                       |                     | 2,380                | 6,936     |                          |                     |                         |                            |
| Unconstrained   |                        |                        |                        |          |                      | 300                      |           |                       |                 | 15,802.7                |                     |                      | 741       | 103                      |                     |                         |                            |
| <b>Flagship high yield bond strategy</b>                        |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| Information ratio   | 0.46                   |                        |                        |          | 1.13 <sup>(12)</sup> | 1.1 <sup>(8)</sup>       |           |                       | 0.12            | 0.189                   | 2.05 <sup>(1)</sup> | 1.77                 |           | >0.5                     | 0.25 <sup>(8)</sup> | 0.75                    | 0.59                       |
| Acceptable tracking error                                       | <4.5%                  | 1-4%                   |                        |          | 2%                   |                          |           |                       | 2.085%          | NA                      | 1-5%                | 1.80%                |           | 0-6%                     | 5%                  | 0-3%                    | <sup>(11)</sup>            |
| <b>Targeted contribution to excess return (%)</b>               |                        |                        |                        |          |                      |                          |           |                       |                 |                         |                     |                      |           |                          |                     |                         |                            |
| Credit analysis   | 70                     | 80                     | 60                     | 60       | 20                   | 50                       |           |                       | 30              | 80                      | 100                 | 90                   |           | 85 <sup>(10)</sup>       | 100                 |                         | 66                         |
| Duration management   | 0                      | 0                      | 0                      | 10       | 15                   | 0                        |           |                       | 10              | 5                       | 0                   | 0                    |           | 5                        | 0                   |                         |                            |
| Sector rotation   | 30                     | 20                     | 30                     | 30       | 50                   | 50                       |           |                       | 15              | 5                       | 0                   | 0                    |           | 10                       | 0                   |                         |                            |
| Credit default swaps  | 0                      | 0                      | 0                      | 0        | 0                    | 0                        |           |                       | 0               | 0                       | 0                   | 0                    |           | 0                        | 0                   |                         |                            |
| Currency  | 0                      | 0                      | 0                      | 15       | 0                    | 0                        |           |                       | 15              | 0                       | 0                   | 0                    |           | 0                        | 0                   |                         |                            |
| Other   |                        |                        |                        |          |                      |                          |           |                       |                 | 10 <sup>(14)</sup>      |                     | 10 <sup>(15)</sup>   |           |                          |                     |                         | 33                         |
| Proportion of high yield bond research done in-house            | 70                     | 0                      | 90                     | 100      | <sup>(14)</sup>      | 100                      |           | 100                   | 80              | 90                      | 100                 | 100                  |           | 100                      | 100                 | 100                     | <sup>(16)</sup>            |
| Number of credit analysts working on high yield bond portfolios | 37                     | 60+                    | 26                     | 29       | 37                   | 17                       |           | 9                     | 27              | 11                      | 6                   | 37                   |           | 11                       | 5                   | 14                      | 22                         |

## IN SUMMARY

### Survey overview

|   |         |
|---|---------|
| Total number of managers in survey                                | 67      |
| Total assets invested in high yield bond strategies (€m)*         | 551,505 |
| Total invested for institutional clients worldwide (€m)*          | 315,502 |
| Total invested for European institutional clients (€m)*           | 154,826 |
| Total invested for European pension fund clients (€m)             | 29,608  |
| Total invested for European insurance company clients (€m)*       | 25,416  |
| Total invested for all other European institutional clients (€m)* | 71,430  |
| Total invested through segregated account mandates (€m)*          | 210,234 |
| Total invested through pooled funds (€m)*                         | 374,974 |

\*Where disclosed

### Top managers: High yield bond strategies

| Company                                | €m     | As at    |
|--|--------|----------|
| 1 BlackRock                            | 61,079 | 31/12/17 |
| 2 J.P. Morgan Asset Management         | 46,452 | 31/12/17 |
| 3 PGIM                                 | 27,333 | 31/12/17 |
| 4 T. Rowe Price                        | 24,660 | 30/12/17 |
| 5 Neuberger Berman                     | 23,929 | 31/12/17 |
| 6 Principal Global Investors           | 23,597 | 31/12/17 |
| 7 State Street Global Advisors         | 21,555 | 31/12/17 |
| 8 AXA Investment Managers              | 20,326 | 31/12/17 |
| 9 Amundi                               | 19,369 | 31/12/17 |
| 10 Columbia Threadneedle Investments   | 17,122 | 31/12/17 |
| 11 Western Asset Management Co.        | 16,992 | 31/12/17 |
| 12 Loomis, Sayles & Co.                | 14,456 | 31/12/17 |
| 13 Aegon Asset Management              | 14,080 | 31/12/17 |
| 14 Muznich & Co.                       | 12,054 | 31/12/17 |
| 15 Goldman Sachs Asset Management Int. | 12,013 | 31/12/17 |
| 16 MEAG                                | 11,346 | 31/12/17 |
| 17 Eaton Vance                         | 10,517 | 31/12/17 |
| 18 Robeco                              | 10,016 | 31/12/17 |
| 19 Barings                             | 9,833  | 31/12/17 |
| 20 Federated Investors                 | 9,828  | 31/12/17 |
| 21 Lord, Abbett & Co.                  | 9,807  | 31/12/17 |
| 22 Deutsche Asset Management           | 9,201  | 31/12/17 |
| 23 UBS Asset Management                | 8,220  | 31/12/17 |
| 24 Capital Four Management             | 7,717  | 31/01/18 |
| 25 Candriam                            | 7,429  | 31/12/17 |
| 26 M&G Investments                     | 6,603  | 31/12/17 |
| 27 DDJ Capital Management              | 6,523  | 31/12/17 |
| 28 AllianceBernstein                   | 6,461  | 31/12/17 |
| 29 Wells Fargo AM/Wells CM             | 6,050  | 31/12/17 |
| 30 NN Investment Partners              | 5,718  | 31/12/17 |
| 31 BlueBay Asset Management            | 5,408  | 31/12/17 |
| 32 Aviva Investors                     | 5,265  | 30/09/17 |
| 33 Union Bancaire Privée               | 4,800  | 31/12/17 |
| 34 SKY Harbor Capital Management       | 4,714  | 31/01/18 |
| 35 Eurizon Asset Management            | 4,692  | 31/12/17 |

### Top managers: High yield bond assets invested for European institutional clients

| Company                                | €m     | As at    |
|--|--------|----------|
| 1 J.P. Morgan Asset Management         | 23,573 | 31/12/17 |
| 2 Muznich & Co.                        | 11,274 | 31/12/17 |
| 3 MEAG                                 | 10,405 | 31/12/17 |
| 4 AXA Investment Managers              | 9,322  | 31/12/17 |
| 5 Capital Four Management              | 6,101  | 31/01/18 |
| 6 Columbia Threadneedle Investments    | 5,996  | 31/12/17 |
| 7 Aegon Asset Management               | 5,914  | 31/12/17 |
| 8 Neuberger Berman                     | 4,805  | 31/12/17 |
| 9 Candriam                             | 4,733  | 31/12/17 |
| 10 Principal Global Investors          | 4,545  | 31/12/17 |
| 11 BlackRock                           | 4,381  | 31/12/17 |
| 12 Goldman Sachs Asset Management Int. | 4,317  | 31/12/17 |
| 13 NN Investment Partners              | 3,584  | 31/12/17 |
| 14 SKY Harbor Capital Management       | 3,344  | 31/01/18 |
| 15 Aviva Investors                     | 3,239  | 30/09/17 |
| 16 Robeco                              | 3,182  | 31/12/17 |
| 17 Eurizon Asset Management            | 3,085  | 31/12/17 |
| 18 Union Bancaire Privée               | 2,999  | 31/12/17 |
| 19 Achmea Investment Management        | 2,353  | 31/12/17 |
| 20 T. Rowe Price                       | 2,232  | 30/12/17 |
| 21 Aberdeen Standard Investments       | 2,150  | 31/12/17 |
| 22 Legal & General Investment Mngt.    | 2,096  | 30/06/17 |
| 23 ODDO BHF AM                         | 2,092  | 31/12/17 |
| 24 PGIM                                | 2,039  | 31/12/17 |
| 25 AllianceBernstein                   | 1,876  | 31/12/17 |
| 26 DDJ Capital Management              | 1,829  | 31/12/17 |
| 27 Barings                             | 1,756  | 31/12/17 |
| 28 Deutsche Asset Management           | 1,569  | 31/12/17 |
| 29 Putnam Investments                  | 1,139  | 31/12/17 |
| 30 State Street Global Advisors        | 1,088  | 31/12/17 |
| 31 Degroof Petercam Asset Management   | 1,029  | 31/12/17 |
| 32 La Française                        | 1,019  | 31/12/17 |
| 33 Natixis Asset Management            | 1,014  | 31/12/17 |
| 34 Pareto Asset Management             | 991    | 28/02/18 |
| 35 BlueBay Asset Management            | 941    | 31/12/17 |

