

IPE SURVEY GOVERNMENT BONDS

Company	Aberdeen Standard Investments	Achmea Investment Management	Aegon Asset Management	AllianceBernstein	Amundi	ASR Vermogensbeheer	AXA Investment Managers	Bantleon Bank	Bairings	BayernInvest Kapital.	BlackRock
As at	31/12/17	30/04/18	31/12/17	31/03/18	31/03/18	31/03/18	31/03/18	30/04/18	31/03/18	30/04/18	31/03/18
Total assets invested in government bond strategies	45,799.45 ⁽¹⁾	25,808	100,394	10,745	91,395	2,500	8,852	3,602	5,647	3,450.6	423,276
Total assets invested in government bonds overall	NA	NA	100,394	63,638	NA	12,000	185,261	3,602	17,604	14,266.4	713,012
Total group assets under management worldwide	648,518.34	131,273	318,078	446,789	1,452,416	55,000	745,424	5,995.3	248,270	86,321	5,136,386
Total assets in fixed income worldwide	160,684.8	65,966	237,188	217,455	685,611	35,000	446,180	5,449.8	208,534	57,009.9	1,533,946
Assets invested in government bond strategies											
Vehicle type (€m)											
Segregated account mandates	27,194.47	24,052		9,396	53,101	1,500	5,515	2,287.3	5,589	3,424.9	144,916 ⁽²⁾
Pooled funds	18,604.98	1,756		1,349	38,294	1,000	3,337	1,314.7	58	25.7	110,644 ⁽²⁾
Client type (€m)											
Europe-based institutional clients	40,918	25,808	79,625	796	42,550	2,500	7,666	3,371.9	27	3,450.6	130,618 ⁽²⁾
Institutional clients worldwide	41,676.42	25,808	100,394	10,239	64,053	2,500	8,577	3,421.9	5,620	3,450.6	187,653 ⁽²⁾
Europe-based pension fund clients	9,740.05	12,945		329		500	2,095		27	NA	101,948 ⁽²⁾
Europe-based insurance company clients	29,521.48					1,000	4,034		0	NA	1,580 ⁽²⁾
All other Europe-based institutional clients	5,656.47			467		1,000	1,537		0	3,450.6	27,090 ⁽²⁾
Location of issuance (€m)											
Europe	40,950.33				59,717	2,400	6,981	3,516	668	3,259.2	155,198
US	61.48				24,090			45	2,228	1.4	223,820
Other issues	4,787.64				7,588	100	1,871	41	2,751	190	44,258
Currency of issue (€m)											
Euro-denominated bonds	5,728.92	25,788			56,569	2,500	6,981	3,477	468	3,242.9	73,968
Dollar-denominated bonds	4,945.76				31,493			80	2,228	190.4	223,819
Sterling-denominated bonds	29,978.04				356			25	200	0	72,529
Other-denominated bonds	5,146.73				2,977		1,871	20	2,751	17.3	52,960
Amount held within rating (€m)											
AAA-A		21,344				2,300		3,240.1	5,081	1,768.8	397,827
BBB-B		4,361				200		361.9	556	1,595.2	24,548
CCC-C		0								0.7	
Unrated		103								85.9	901
Active/passive/unconstrained (€m)											
Passive		6,199								2,090	235,554
ETFs		0								0	65,245
Benchmarked active	45,340.41	16,553				1,000	4,926		2,338	1,360.6	20,006
Benchmarked against an enhanced/alternatively-weighted index		0				0	3,926				1,574
Managed against a customised benchmark or risk/return target	459.04	3,056				1,500					
Unconstrained		0									
Flagship government bond strategy											
Information ratio	0.93	0.23		0.67		0.5-0.75	0.5			1	
Acceptable tracking error	1-2%	0.5%		1-3%		1%	1%			4%	
Targeted contribution to excess return (%)											
Credit analysis	0			0			15 ⁽⁴⁾	30			20
Duration management	30			55			20	40			50
Sector rotation	0			25				30			30
Credit default swaps	0			0				0			0
Currency	10			20				0			0
Other	60 ⁽³⁾					100	65 ⁽⁵⁾				
Proportion of government bond research done in-house (%)	70	100	90	100	100	100	90	100	100	80	80
Number of credit analysts working on government bond portfolios	55	7	8	9	7	11 ⁽⁴⁾	4	3			

Survey overview

Total number of managers in survey	45
Total invested: €m	€m
In government bond strategies	2,335,649
Through segregated account mandates*	683,670
Through pooled funds*	546,635
For institutional clients worldwide*	1,320,195
For Europe-based institutional clients*	674,287
For Europe-based pension fund clients*	253,086
For Europe-based insurance company clients*	173,580
For all other Europe-based institutional clients*	117,642

*Where disclosed

Top managers: Assets in government bond strategies

Company	€m	As at
1 Vanguard	782,087	31/03/17
2 BlackRock	423,276	31/03/18
3 State Street Global Advisors	157,958	31/03/18
4 Franklin Templeton Investments	155,373	31/03/18
5 MEAG	110,017	31/12/17
6 Aegon Asset Management	100,394	31/12/17
7 Amundi	91,395	31/03/18
8 Legal & General Investment Management	82,531	31/12/17
9 Aberdeen Standard Investments	45,799	31/12/17
10 Standish Mellon Asset Management Co.	45,151	31/03/17
11 Columbia Threadneedle Investments	36,037	31/03/18
12 Achmea Investment Management	25,808	30/04/18
13 BNP Paribas Asset Management	25,036	31/03/18
14 DWS	23,078	31/12/17
15 Helaba Invest	22,800	30/04/18
16 Colchester Global Investors	21,308	30/04/18
17 Eurizon Asset Management	16,545	31/03/18
18 Insight Investment	16,369	31/03/18
19 Robeco	14,174	31/12/17
20 Payden & Rygel	12,465	31/03/18

Top managers: Government bond assets invested for European institutional clients

Company	€m	As at
1 BlackRock	130,618	31/03/18
2 MEAG	100,528	31/12/17
3 Aegon Asset Management	79,625	31/12/17
4 Legal & General Investment Management	69,831	31/12/17
5 Amundi	42,550	31/03/18
6 Aberdeen Standard Investments	40,918	31/12/17
7 State Street Global Advisors	31,856	31/03/18
8 Achmea Investment Management	25,808	30/04/18
9 Helaba Invest	22,800	30/04/18
10 Generali Investments	12,380	30/03/18
11 Robeco	9,336	31/12/17
12 Insight Investment	8,907	31/03/18
13 BNP Paribas Asset Management	7,771	31/03/18
14 AXA Investment Managers	7,666	31/03/18
15 Ostrum Asset Management	7,613	31/03/18
16 Candriam Investors Group	6,975	30/04/18
17 DWS	6,447	31/12/17
18 Columbia Threadneedle Investments	6,237	31/03/18
19 Union Investment	5,731	31/03/18
20 Colchester Global Investors	5,243	30/04/18

Top managers: Government bond assets invested for European pension fund clients

Company	€m	As at
1 BlackRock	101,948	31/03/18
2 Legal & General Investment Management	59,482	31/12/17
3 State Street Global Advisors	15,647	31/03/18
4 Achmea Investment Management	12,945	30/04/18
5 Aberdeen Standard Investments	9,740	31/12/17
6 Robeco	8,668	31/12/17
7 Helaba Invest	7,550	30/04/18
8 DWS	4,666	31/12/17
9 TKP Investments	4,409	31/03/18
10 Eurizon Asset Management	3,705	31/03/18
11 Insight Investment	3,624	31/03/18
12 MEAG	2,641	31/12/17
13 BNP Paribas Asset Management	2,614	31/03/18
14 Generali Investments	2,326	30/03/18
15 AXA Investment Managers	2,095	31/03/18
16 Kempen Capital Management	1,916	31/12/17
17 Colchester Global Investors	1,894	30/04/18
18 Ostrum Asset Management	1,165	31/03/18
19 Columbia Threadneedle Investments	1,143	31/03/18
20 Vanguard	968	31/03/17

Company	BlueBay Asset Management	BMO Global Asset Management	BNP Paribas Asset Management	Candriam Investors Group	Colchester Global Investors	Columbia Threadneedle Investments	Degroof Petercam Asset Management	Deka	DWS	Eurizon Asset Management	Franklin Templeton Investments
As at	31/03/18	31/12/17	31/03/18	30/04/18	30/04/18	31/03/18	31/12/17	31/12/17	31/12/17	31/03/18	31/03/18
Total assets invested in government bond strategies	3,355	9,995.54 ⁽¹⁾⁽²⁾	25,036	8,172.48	21,308	36,037	2,413	NA	23,078	16,545	155,373.3
Total assets invested in government bonds overall	16,301	17,092.29 ⁽¹⁾⁽²⁾		24,121.51	21,308	36,037	3,592	17,662	38,049		187,842.4
Total group assets under management worldwide	49,318	216,843.85	567,920	112,261.28	35,233	395,206	33,587	231,100	701,736	310,539	598,625.7
Total assets in fixed income worldwide	49,318		304,846	33,328	35,233	146,236	10,369	38,933	288,824	247,212	227,426.9
Assets invested in government bond strategies											
Vehicle type (€m)											
Segregated account mandates	0		22,915	6,155.09	16,542	15,806	290		12,887	4,489	15,303.4
Pooled funds	3,355		2,121	2,017.39	4,766	20,231	2,123		10,191	12,056	140,069.9
Client type (€m)											
Europe-based institutional clients	506	4,931.98 ⁽¹⁾⁽²⁾	7,771	6,975.2	5,243	6,237	2,413		6,447	4,941	2,350.3
Institutional clients worldwide	506		23,713	7,119.83	21,308	15,806	2,413		12,887	4,941	18,833.5
Europe-based pension fund clients	450		2,614	0	1,894	1,143	869		4,666	3,705	
Europe-based insurance company clients	20		546	3,502.23	44	4,430	72		542	490	
All other Europe-based institutional clients	36		4,611	3,472.97	3,305	664	1,472		1,239	746	
Location of issuance (€m)											
Europe	2,947 ⁽³⁾			7,916.38	3,995		2,129				
US	16			112.9	8,078		284				
Other issues	392			143.2	9,235						
Currency of issue (€m)											
Euro-denominated bonds	2,739 ⁽³⁾			7,822.3	3,581	13	1,808				
Dollar-denominated bonds	616			103.22	8,078	28,758	248				
Sterling-denominated bonds	0			82.94	414	6,674	45				
Other-denominated bonds				164.02	9,235	592	312				
Amount held within rating (€m)											
AAA-A	1,299 ⁽³⁾			6,100.43	21,308		2,101 ⁽¹⁾⁽²⁾				
BBB-B	2,056			1,273.81			1,491				
CCC-C	0			0			0				
Unrated	0			798.24			0				
Active/passive/unconstrained (€m)											
Passive	0			429.75			0			6,012	
ETFs	0			58.1			0		8,388		
Benchmarked active	2,416			7,684.63	21,308	36,037	2,413		5,201	10,533	
Benchmarked against an enhanced/alternatively-weighted index	0			0			0				
Managed against a customised benchmark or risk/return target	0			0			0				

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Company	Generali Investments	Helaba Invest	Insight Investment	Janus Henderson Investors	J.P. Morgan Asset Management	Kempen Capital Management	La Française	Legal & General Investment Management	Macquarie Asset Management	MEAG	Mondrian Investment Partners
As at	30/03/18	30/04/18	31/03/18	31/03/18	31/03/18	31/12/17	31/03/18	31/12/17	31/03/18	31/12/17	31/03/18
Total assets invested in government bond strategies	12,380	22,800	16,369	1,777	11,004	2,402	1,274	82,531	1,115.39	110,017	2,040
Total assets invested in government bonds overall	186,530	22,800	43,490	9,190	79,944	15,218	5,254	206,340	14,388.87	110,017	2,101
Total group assets under management worldwide	459,889	60,480	680,522	302,385	1,367,490	59,807	69,248	1,107,666	301,527.22	252,480	48,410
Total assets in fixed income worldwide	383,630	31,800	295,700	66,098	406,922	30,386	23,749	401,095	123,313.01	188,197	3,250
Assets invested in government bond strategies											
Vehicle type (€m)											
Segregated account mandates	5,434	22,700	12,213	916	9,059	2,229	797	29,079	772.29	93,795	1,612
Pooled funds	6,946	100	4,156	861	1,945	173	477	53,452	343.1	16,222	428
Client type (€m)											
Europe-based institutional clients	12,380	22,800	8,907	1,777	153.8	2,256	1,225	69,831	629.13	100,528	290
Institutional clients worldwide	12,380	22,800	15,781	1,777	9,059	2,256	1,225	79,393	959.96	9,490	2,040
Europe-based pension fund clients	2,326	7,550	3,624	902		1,916	100	59,482	143.61	2,641	209
Europe-based insurance company clients	7,909	6,350	846		110.2	248	271	3,415	23.94	107,376	0
All other Europe-based institutional clients	2,145	8,900	4,437		43.6	92	854	6,934	461.58		81
Location of issuance (€m)											
Europe	12,082		8,166	1,001	5,240	2,386	1,066	462.4	642.09	100,528	611
US	151		6,545		2,288	16	7		11.9	7,107	750
Other issues	147		1,658		3,476		201			2,382	679
Currency of issue (€m)											
Euro-denominated bonds	12,371		4,867		2,846	2,268	1,268	451.7	69.489	69,489	566
Dollar-denominated bonds	8		6,535		5,747	16	6	651.69	18,937	677	677
Sterling-denominated bonds	1		3,032	918	639	118	0	4.3	3,661	33	33
Other-denominated bonds			1,935		1,772			7.7	17,930	764	764
Amount held within rating (€m)											
AAA-A	699		12,499	1,133	9,719	2,334	757	937.39	96,922	1,991	1,991
BBB-B	11,516		3,542		1,008	11	220	176.1	12,412	49	49
CCC-C			0		0	0	0	0	0	0	0
Unrated	165		328		277	7	297	1.9	683	0	0
Active/passive/unconstrained (€m)											
Passive				687			0	72,037	76	0	0
ETFs				0			0		0	0	0
Benchmarked active	9,074			1,090	11,004	2,352	1,274	3,797	1,039.39	38,506	2,040
Benchmarked against an enhanced/alternatively-weighted index				0		50	0	3,125	0	0	0
Managed against a customised benchmark or risk/return target				0			0	3,572	71,511	0	0
Unconstrained	3,306			0			0		0	0	0
Flagship government bond strategy											
Information ratio	1.06		-0.12		0.81	0.05	2.7	NA	NA	1.17	0.5
Acceptable tracking error	1-3%		30bps		100bps	1.05%	2%	0-1.5%	NA	NA	1-3%
Targeted contribution to excess return (%)											
Credit analysis	35 ⁽¹⁾		15	0	25	0	0	4	15	20	20
Duration management	40		60	80	30	50	50	24	25	30	0
Sector rotation			0	0	10	0	5			40	0
Credit default swaps			0	0	0	0	0			0	0
Currency			10	20	0	0	0			15	40
Other	25 ^{(1)(H)}		15 ^{(1)(H)}		60 ^{(2)(H)}	25	25 ^{(2)(H)}	72 ^{(2)(H)}	75 ^{(2)(H)}		40 ^{(2)(H)}
Proportion of government bond research done in-house (%)	100		100	100	100	100	100	100	80-100	50	90-95
Number of credit analysts working on government bond portfolios	12		4	10	60	3	9	17	21	22	8

Key:
NA= Not available; ND= Not disclosed

- Footnotes:**
- (1) Includes all assets managed by Macro Rates and Real Returns teams, which include AUM in global and aggregate bond funds
 - (2) Country, 30%; curve, 30%
 - (3) Duration positioning, 40%; curve positioning, 20%; country positioning, 25%; currency positioning, 5%; relative value/security selection, 10%
 - (4) Agency, supranational, covered
 - (5) Curve exposure, country allocation
 - (6) Relates to research and investment strategy employees
 - (7) Relates to dedicated government bond mandates only
 - (8) Breakdown does not include cash or derivatives
 - (9) Relative
 - (10) Excluding LDI assets
 - (11) Curve, 10%; country and government bond selection, 20%; inflation linked bonds, 10%
 - (12) Country selection
 - (13) Security selection
 - (14) 5-year
 - (15) Breakdown relates to total assets invested in government bonds overall
 - (16) Country allocation, 20%; yield curve positioning, 15%; issuer selection, 10%; off-benchmark selection, 20%
 - (17) Country allocation
 - (18) Yield curve
 - (19) Majority
 - (20) Country allocation, 30%; yield curve, 30%
 - (21) Inflation, 15%; relative value, 10%
 - (22) Curve, 12%; country, 24%; peripheral, 10%; stock selection, 6%; inflation/breakevens, 20%
 - (23) Curve positioning, 25%; sector allocation, 25%; security selection, 25%
 - (24) Market
 - (25) Country allocation, 30%; security selection, 5%
 - (26) Yield curve, 15%; security selection, 15%
 - (27) Credit beta management
 - (28) 3-year
 - (29) Country allocation, 50%; yield curve positioning, 15%
 - (30) Yield curve positioning, 30%; country selection, 10%

Top managers: Government bond assets in segregated accounts

Company	€m	As at
1 BlackRock	144,916	31/03/18
2 State Street Global Advisors	94,941	31/03/18
3 MEAG	93,795	31/12/17
4 Amundi	53,101	31/03/18
5 Legal & General Investment Management	29,079	31/12/17
6 Aberdeen Standard Investments	27,194	31/12/17
7 Achmea Investment Management	24,052	30/04/18
8 BNP Paribas Asset Management	22,915	31/03/18
9 Helaba Invest	22,700	30/04/18
10 Colchester Global Investors	16,542	30/04/18
11 Columbia Threadneedle Investments	15,806	31/03/18
12 Franklin Templeton Investments	15,303	31/03/18
13 DWS	12,887	31/12/17
14 Insight Investment	12,213	31/03/18
15 Payden & Rygel	11,813	31/03/18
16 AllianceBernstein	9,396	31/03/18
17 J.P. Morgan Asset Management	9,059	31/03/18
18 Robeco	6,582	31/12/17
19 Candriam Investors Group	6,155	30/04/18
20 Morgan Stanley Investment Management	6,126	31/03/18

Top managers: Government bonds issued in Europe

Company	€m	As at
1 BlackRock	155,198	31/03/18
2 MEAG	100,528	31/12/17
3 Amundi	59,717	31/03/18
4 Aberdeen Standard Investments	40,950	31/12/17
5 Robeco	14,079	31/12/17
6 Generali Investments	12,082	30/03/18
7 Insight Investment	8,166	31/03/18
8 Candriam Investors Group	7,916	30/04/18
9 Union Investment	7,617	31/03/18
10 AXA Investment Managers	6,981	31/03/18
11 Ostrum Asset Management	6,011	31/03/18
12 J.P. Morgan Asset Management	5,240	31/03/18
13 TKP Investments	4,402	31/03/18
14 Colchester Global Investors	3,995	30/04/18
15 Bantleon Bank	3,516	30/04/18
16 BayernInvest Kapital	3,259	30/04/18
17 BlueBay Asset Management	2,947	31/03/18
18 State Street Global Advisors	2,642	31/03/18
19 ASR Vermögensbeheer	2,400	31/03/18
20 Kempen Capital Management	2,386	31/12/17

Company	Morgan Stanley Investment Management	Ostrum Asset Management	Payden & Rygel	Putnam Investments	Robeco	Schroder Investment Management	Standish Mellon Asset Management Co.	State Street Global Advisors	Swisscanto Invest (Zürcher Kantonalbank)	TKP Investments	Union Investment	Vanguard
As at	31/03/18	31/03/18	31/03/18	31/03/18	31/12/17	30/03/18	31/03/17	31/03/18	30/04/18	31/03/18	31/03/18	31/03/17
Total assets invested in government bond strategies	6,867	8,276	12,465	631	14,174	4,933	45,151	14,174	157,958	3,741	8,464	782,087
Total assets invested in government bonds overall	12,273	99,126	30,978	2,904	16,272	NA	76,102	195,886	NA	4,410	69,803	ND
Total group assets under management worldwide	381,424	343,927	95,215	137,820	161,060	486,023	144,802	2,218,863	134,499	0	326,183	3,963,992
Total assets in fixed income worldwide	58,744	224,572	93,098	57,875	40,560	86,748	144,802	345,211	46,736	9,424	163,275	928,611
Assets invested in government bond strategies												
Vehicle type (€m)												
Segregated account mandates	6,126	1,709	11,813	631	6,582	3,122		94,941	87	3,543	5,147	
Pooled funds	741	6,567	652	0	7,592	1,811		63,017	3,654	867	3,317	
Client type (€m)												
Europe-based institutional clients	55	7,613	1,674	0	9,336	711	582	31,856	3,741	4,410	5,731	2,655
Institutional clients worldwide	6,515	7,613	12,465	631	9,373	3,584		212,840	3,741	4,410	5,731	335,211
Europe-based pension fund clients	55	1,165	195	0	8,668	0		15,647		4,409	160	968
Europe-based insurance company clients	0	1,310	75	0	78	11		3,393		1	288	93
All other Europe-based institutional clients	0	5,138	12,195	631	590	700		12,816		0	5,283	1,594
Location of issuance (€m)												
Europe	1,737	6,011	1,023	272	14,079			2,642	1,543	4,402	7,617	
US	3,755	1,811	11,129	203	1,017			101,327	1,017	8	197	
Other issues	1,375	454	313	156	85			53,989	1,181		650	
Currency of issue (€m)												
Euro-denominated bonds	284	5,710	525	237	13,855					4,402	7,950	
Dollar-denominated bonds	5,250	1,854	11,163	177	157					8	278	
Sterling-denominated bonds	106	271	545	38	2					0	110	
Other-denominated bonds	1,227	441	232	179	160					0	126	
Amount held within rating (€m)												
AAA-A	6,048	5,455	12,339	517	12,090					4,272	5,879	
BBB-B	641	2,658	126	119	1,656					18	2,569	
CCC-C	0	0	0	0	0					0	0	
Unrated	178	163	0	359	428					120	16	
Active/passive/unconstrained (€m)												
Passive	0	0	7,133					156,888	2,995	4,287	0	496,924
ETFs	0	0	0					11,113	0	0	0	2,393
Benchmarked active	6,867	3,807	1,675	631	14,174			1,070	746	122	8,464	285,164
Benchmarked against an enhanced/alternatively-weighted index	0	16	0					0	0	0	0	0