

Fundación **MAPFRE**

RANKING
OF THE LARGEST EUROPEAN
INSURANCE GROUPS
2016



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Introduction

As with previous editions, this version of the **Ranking of the Largest European Insurance Groups 2016** is based on the criterion of overall premium volume. However, in this instance, this ordinal classification is followed by an analysis of the trends in the past decade that led to the current ranking, and the outlook for convergence among market players.

As in previous years, the first section of the report presents rankings of Europe's largest insurance groups in terms of total business, as well as in the Life and Non-Life segments, with a description of their key characteristics.

The second section contains information about the solvency ratio of each of the insurance groups in the overall Life and Non-Life rankings. This data has been gathered from the reports published by the groups as per their regulations.

The third section describes, for the first time, the path toward convergence of each insurance group. This analysis includes looking into how the groups' premium value has changed over the last decade, showing secular trends against dynamics specific to the current cycle.¹ Additionally, a link is made between the size and growth capacity of each group, while identifying the shared trend in their convergence dynamics.

Lastly, this analysis is complemented by an appendix with a graphical analysis of the cycle and trend for each insurance group in the ranking, following the methodology used in the study.

MAPFRE Economic Research

1. Rankings

1.1. Overall Ranking

Size and Growth

The 15 largest European insurance groups by premium volume registered revenue of 575.9 billion euros in 2016, which represents a slight 1 percent decrease on the previous year (see Table 1.1-a). Seven groups saw their premium revenue go up, particularly Poste Vita (9.3 percent). Next comes AXA (2.7 percent), Aegon (2.3 percent), Aviva and MAPFRE (2.2 percent), Crédit Agricole (1.3 percent) and CNP (0.5 percent). The revenue of all other groups went down, although some saw growth when expressed in the currency of their financial statements.

One factor that clearly impacted the financial results of these groups, in terms of both revenues and profit and loss, was the fluctuation in the different exchange rates of the economies they operate in. This was particularly significant in 2016, most notably as a result of the financial net results of the pound sterling and the Latin American currencies against the euro.

In general, the Non-Life segment of these groups performed better than the Life segment due to a contraction of Life insurance in advanced markets, which was not fully balanced out by the fast growth of emerging countries, particularly China. However, Non-Life premiums fell for eight insurance groups in this ranking. This is explained by the effect of exchange rates and by more restrictive underwriting policies and highly competitive market conditions.

AXA is still at the top of the ranking with 94,220 million euros in premium volume and 2.7 percent growth in 2016. The top five groups in the ranking are the same as last year, and so are the last four. CNP moved up one position over Talanx and is now sixth, while Aviva moved ahead of Crédit Agricole Assurance to the eighth position. The Dutch group Aegon is tenth in the ranking this year, due to a voluntary change to its accounting policy in 2016 at its subsidiary in the

UK, which applies IAS 39 criteria to contractual changes. Adjustments made in previous years resulted in an increase of 2,614 million euros in premiums in 2015, reaching 22,925 million euros. After these changes, Aegon is in tenth position in the 2016 ranking, followed by MAPFRE (position eleven).

Results and Balance Sheet

The aggregate net profit of the 15 largest European insurance groups grew 6.4 percent in 2016 compared with the previous year (see Table 1.1-b). Only three groups saw lower profits during this period (Prudential, Aviva and Covéa), while Ergo posted losses.

The positive performance of most groups stems from a successful policy focused on profitability. Additionally, low interest rates meant that the financial net results did not improve so much, and still added a low margin to the result of the top European insurers.

Table 1.1-c shows basic information about the balance sheets of the groups in the ranking. In general, and as with profit and loss, in some cases the main balance sheet headings were affected by the variation in currency value of the economies in which the groups operate.

Table 1.1-a
Overall market: overall ranking of European insurance groups, 2016
Ranking by premium volume

	Group	Country	Premiums (million euros)					%Δ premium 2006-2016	%y/y premium 2006-2016 (annual average)	% y/y premium 2015-2016
			2006	2015	2016	Δ 2006 -2015	Δ 2015- 2016			
1	AXA	France	72.099	91.730	94.220	19.631,0	2.490,0	30,7 %	2,8 %	2,7 %
2	ALLIANZ	Germany	65.275	76.723	76.331	11.448,0	-392,0	16,9 %	1,5 %	-0,5 %
3	GENERALI	Italy	63.152	74.165	70.513	11.013,0	-3.652,0	11,7 %	1,1 %	-4,9 %
4	PRUDENTIAL	United Kingdom	23.698	50.642	47.438	26.944,4	-3.204,7	100,2 %	9,1 %	-6,3 %
5	ZURICH	Switzerland	36.826	43.917	43.650	7.090,8	-267,3	18,5 %	1,7 %	-0,6 %
6	CNP	France	31.922	31.329	31.495	-592,8	165,5	-1,3 %	-0,1 %	0,5 %
7	TALANX	Germany	19.368	31.799	31.106	12.431,3	-693,0	60,6 %	5,5 %	-2,2 %
8	AVIVA	United Kingdom	42.146	30.285	30.962	-11.861,4	676,6	-26,5 %	-2,4 %	2,2 %
9	CRÉDIT AGRICOLE ASSURANCE	France	24.288	30.369	30.775	6.081,0	406,0	26,7 %	2,4 %	1,3 %
10	AEGON	Netherlands	24.570	22.925	23.453	-1.645,0	528,0	-4,5 %	-0,4 %	2,3 %
11	MAPFRE	Spain	10.933	22.312	22.813	11.379,0	501,0	108,7 %	9,9 %	2,2 %
12	BNP PARIBAS CARDIF	France	15.524	22.126	20.808	6.601,9	-1.318,4	34,0 %	3,1 %	-6,0 %
13	POSTE VITA	Italy	5.994	18.238	19.929	12.244,4	1.691,0	232,5 %	21,1 %	9,3 %
14	COVÉA	France	12.179	17.318	16.411	5.138,7	-907,2	34,7 %	3,2 %	-5,2 %
15	ERGO	Germany	15.930	16.535	16.035	605	-500	0,7 %	0,1 %	-3,0 %

Total Top 5	261.050	337.177	332.151	76.127,3	-5.025,9
Total Top 15	463.904	580.413	575.937	116.509,4	-4.476,4

Source: MAPFRE Economic Research (with data from the groups' annual reports)

Table 1.1-b
Overall market: net profit/(loss) of European insurance groups, 2016

Group	Country	Net profit/(loss) (million euros)		% a/a 2015-2016	Attributable to controlling company (million euros)		% y/y 2015-2016
		2015	2016		2015	2016	
AXA	France	5.987	6.193	3,4 %	5.617	5.829	3,8 %
ALLIANZ	Germany	6.987	7.250	3,8 %	6.616	6.883	4,0 %
GENERALI	Italy	2.259	2.239	-0,9 %	2.030	2.081	9,4 %
PRUDENTIAL	United Kingdom	3.562	2.338	-34,4 %	3.562	2.338	-34,4 %
ZURICH	Switzerland	1.854	3.149	69,9 %	1.668	2.907	74,3 %
CNP	France	1.435	1.497	4,3 %	1.131	1.200	6,2 %
TALANX	Germany	1.409	1.568	11,3 %	734	907	23,6 %
AVIVA	United Kingdom	1.515	1.045	-31,0 %	1.293	856	-33,8 %
CRÉDIT AGRICOLE ASSURANCE	France	1.040	1.374	32,1 %	1.036	1.368	32,0 %
AEGON	Netherlands	-523	586	212,0 %	-524	586	211,8 %
MAPFRE	Spain	1.199	1.245	3,9 %	709	775	9,4 %
BNP PARIBAS CARDIF	France	391	438	11,9 %	391	436	11,5 %
POSTE VITA	Italy	348	396	13,9 %	348	396	13,9 %
COVÉA	France	1.060	837	-21,0 %	1.049	825	-21,4 %
ERGO	Germany	-227	-40	82,4 %	N/A	N/A	N/A
Total		28.297	30.116	6,4 %			

Source: MAPFRE Economic Research (with data from the groups' annual reports)

Table 1.1-c
Overall market: balance sheet of European insurance groups, 2016
(billion euros)

Group	LIABILITIES*													
	Shareholders' equity						Technical provisions				Other		Total liabilities	
	Capital and reserves		Non-controlling interests		Total		Technical provisions		Policyholder/insured party risk					
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
AXA	68	71	4	5	73	76	432	449	195	176	187	192	887	893
ALLIANZ	63	67	3	3	66	70	558	578	106	111	119	124	849	884
GENERALI	24	25	1	1	25	26	347	361	58	61	71	74	501	521
PRUDENTIAL	18	17	0	0	18	17	288	289	174	184	53	62	533	551
ZURICH	29	29	2	2	30	31	167	173	117	120	38	41	352	364
CNP	17	18	1	2	19	19	309	314	40	47	25	38	394	419
TALANX	8	9	5	6	13	15	107	110	10	11	22	21	153	157
AVIVA	24	21	2	2	25	23	281	255	162	153	66	85	534	516
CRÉDIT AGRICOLE ASSURANCE	14	15	0	0	14	15	246	255	49	53	36	38	345	361
AEGON	26	25	0	0	26	25	141	139	203	206	46	56	416	426
MAPFRE	9	9	2	2	10	11	43	45	2	2	8	9	63	68
BNP PARIBAS CARDIF	4	3	0	0	4	3	115	119	39	43	19	21	177	186
POSTE VITA	3	3	-	-	3	3	93	107	7	7	2	2	106	119
COVÉA	13	13	0	0	13	14	78	80	4	5	5	5	100	103
ERGO**	N/A	N/A	N/A	N/A	7	7	123	126	8	8	15	9	153	150

Source: MAPFRE Economic Research (with data from the groups' annual reports)

+ / A hyphen (-) indicates that there is no figure for the item in question; a zero (0) indicates values lower than one.

**/ Data calculated as the sum of its three segments: Life & Health Germany, Property & Casualty Germany, and International

Table 1.1-c (continued)
Overall market: balance sheet of European insurance groups, 2016
(billion euros)

Group	ASSETS									
	Investments				Cash		Other		Total assets	
	Investments		Policyholder/ insured party risk							
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
AXA	558	588	195	175	26	26	108	104	887	893
ALLIANZ	511	537	106	111	15	14	217	221	849	884
GENERALI	372	391	75	78	9	8	44	44	501	521
PRUDENTIAL	308	311	176	184	11	12	37	45	533	551
ZURICH	169	174	117	120	8	7	59	64	352	364
CNP	331	336	40	47	1	1	22	34	394	419
TALANX	116	119	10	11	2	3	25	25	153	157
AVIVA	262	237	162	156	46	45	64	78	534	516
CRÉDIT AGRICOLE ASSURANCE	284	296	49	52	2	1	10	11	345	361
AEGON	160	157	200	204	10	11	45	54	416	426
MAPFRE	43	45	2	2	1	1	18	19	63	68
BNP PARIBAS CARDIF	127	131	39	42	1	1	11	11	177	186
POSTE VITA	95	109	7	7	2	1	2	2	106	119
COVÉA	84	87	4	5	2	2	10	10	100	103
ERGO*	123	127	8	8	N/A	N/A	N/A	N/A	153	150

Source: MAPFRE Economic Research (with data from the groups' annual reports)

*/ Data calculated as the sum of its three segments: Life & Health Germany, Property & Casualty Germany, and International

1.2. Non-Life Ranking

Size and Growth

The 15 groups in the 2016 top European Non-Life groups issued 250 billion euros in premiums, a very similar figure to 2015 (see Table 1.2-a).

Of the six groups that registered growth, AXA was the main contributor to continued premium maintenance with an absolute increase of 1,019 million euros. After AXA, the largest-growing group was the German R+V (7.7 percent), followed by Ergo (3 percent), MAPFRE (1.5 percent), Groupama (1.1 percent), Covéa (0.7 percent) and Crédit Agricole Assurance (0.6 percent). All other groups saw lower revenues. However, in the case of the UK companies Aviva and RSA, their premiums went up in pounds; the reason for the decrease was the effect of the exchange rate. The Non-Life business of a large number of these groups is mostly located in Europe, mainly in domestic markets. Consequently, the sector's performance in these countries is, to a large extent, important to their revenue performance. Non-Life premiums in Western Europe went up slightly in 2016 on the strength of the region's economic recovery, although premiums in some markets remained stable or even decreased.

Generally speaking, the decrease in premiums stemmed from the following factors, among others: significant variation of the exchange rates of the economies where the groups operate; and the groups' focus on profitability, which meant abandoning less profitable businesses. As for growth, this was fostered by the positive performance of the insurance market in countries such as Germany, France, the UK and Turkey, and by an increase in rates.

The top five groups in the ranking account for more than half of the premiums and for 70 percent of the increase seen during the period under analysis. Allianz maintained its position as the largest European Non-Life insurance group by premium volume with sustained growth throughout the period. In 2016, Allianz's gross written premiums in this segment were 51,535 million euros (-0.1 percent vs. 2015), which places it considerably ahead of the second largest group, AXA, with premium volume of 35,900 million euros. The French group has grown significantly since 2006, when it acquired

insurer Winterthur from the financial group Crédit Suisse. With this deal, AXA strengthened its leading position in several European markets and increased its presence in Central and Eastern Europe and in Asia. As a result, AXA took second place in the ranking in 2007, replacing Zurich. Generali stayed in fourth place throughout the period. Consequently, from 2007, these four groups have remained in the same positions.

The size and growth of the other insurance groups are listed in Table 1.2-a. Unlike in the first four positions, there have been changes in the other relative positions and in the groups involved. When looking at the performance of the groups in the 2016 ranking over the last 11 years, Crédit Agricole Assurance (14.3 percent) and MAPFRE (9.9 percent) recorded the highest average growth figures.

The French group has grown steadily since 2006, with two-figure increases on several occasions. This performance was impacted by the following factors, among others: In 2006, Crédit Agricole acquired the Espírito Santo group and took over management of the bank's insurance companies (BES Vida and BES Seguros). In 2007, it acquired 100 percent of the capital of Assurances Fédérales IARD (AGF owned 60 percent) and opened a Non-Life insurance subsidiary in Italy. Its Greek subsidiary Emporiki Bank² reinforced its insurance division by creating a Non-Life business, Emporiki Insurance. In 2008, the company created Crédit Agricole Creditor Insurance (Caci), specialized in creditor protection insurance.

In turn, the MAPFRE Group strengthened its international investment over the last few years by acquiring the Turkish insurers General Sigorta and Genel Yasam, buying the US insurer Commerce (the largest acquisition in MAPFRE's history) and reaching an agreement with Brazil's largest financial institution (Banco do Brasil) to become one of the leading insurers in the country.

On the opposite end of the scale, Aviva registered the biggest average drop between 2006 and 2016 (-2.7 percent), although the bulk of its issuing took place up to 2013. In early 2009, the British group sold the health business of its subsidiary Delta Lloyd and, in 2011, reduced its stake in this company and ceased consolidating its profit and loss in its financial statements.

Table 1.2-a
Non-Life Market: overall ranking of European insurance groups, 2016
 Ranking by premium volume

	Group	Country	Premiums (million euros)					%Δ premium 2006-2016	%y/y premium 2006-2016 (annual average)	% y/y premium 2015-2016
			2006	2015	2016	Δ 2006 -2015	Δ 2015- 2016			
1	ALLIANZ	Germany	43.674	51.597	51.535	7.923,0	-62,0	18,0 %	1,6 %	-0,1 %
2	AXA	France	23.455	34.881	35.900	11.426,0	1.019,0	53,1 %	4,8 %	2,9 %
3	ZURICH	Switzerland	27.088	30.812	29.990	3.723,5	-821,5	10,7 %	1,0 %	-2,7 %
4	GENERALI	Italy	18.190	20.868	20.783	2.678,0	-85,0	14,3 %	1,3 %	-0,4 %
5	MAPFRE	Spain	8.452	17.441	17.700	8.989,0	259,0	109,4 %	9,9 %	1,5 %
6	TALANX	Germany	12.457	17.732	17.675	5.275,4	-57,0	41,9 %	3,8 %	-0,3 %
7	AVIVA	United Kingdom	16.760	12.070	11.797	-4.690,5	-272,7	-29,6 %	-2,7 %	-2,3 %
8	COVÉA	France	7.992	11.573	11.659	3.581,4	85,6	45,9 %	4,2 %	0,7 %
9	ERGO	Germany	9.426	11.310	11.654	1.883,9	343,7	23,6 %	2,1 %	3,0 %
10	GROUPAMA	France	9.415	9.161	9.263	-254,0	102,0	-1,6 %	-0,1 %	1,1 %
11	RSA	United Kingdom	9.188	9.473	8.786	285,4	-686,6	-4,4 %	-0,4 %	-7,2 %
12	UNIPOL	Italy	4.086	7.373	7.265	3.287,0	-108,0	77,8 %	7,1 %	-1,5 %
13	R+V	Germany	3.831	6.665	7.180	2.833,9	515,4	87,4 %	7,9 %	7,7 %
14	SAMPO GROUP	Finland	4.019	4.559	4.458	540,3	-101,2	10,9 %	1,0 %	-2,2 %
15	CRÉDIT AGRICOLE ASSURANCE*	France	1.700	4.357	4.383	2.657,0	25,6	157,8 %	14,3 %	0,6 %

Total Top 5	120.859	155.599	155.908	34.739,5	309,5
Total Top 15	199.732	249.871	250.028	50.139,2	156,4

Source: MAPFRE Economic Research (with data from the groups' annual reports)

*/ The premium volume was calculated as the difference between the total reported and the Life premiums of its SFCR.

Table 1.2-b
Non-Life Market: Non-Life combined ratio, 2016

Group	Combined ratio			Expense ratio			Loss ratio		
	2015	2016	Variation (pp)	2015	2016	Variation (pp)	2015	2016	Variation (pp)
ALLIANZ	94,6 %	94,3 %	-0,3	28,4 %	28,7 %	0,3	66,2 %	65,6 %	-0,6
AXA	96,2 %	96,5 %	0,3	25,7 %	26,9 %	1,2	70,5 %	69,6 %	-0,9
ZURICH	103,6 %	98,4 %	-5,2	31,7 %	31,8 %	0,1	71,8 %	66,6 %	-5,2
GENERALI	93,1 %	92,5 %	-0,6	27,3 %	27,4 %	0,1	65,9 %	65,1 %	-0,8
MAPFRE	98,6 %	97,4 %	-1,2	28,6 %	27,4 %	-1,2	70,0 %	70,0 %	0,0
TALANX	96,0 %	95,7 %	-0,3	26,9 %	27,9 %	1,0	69,1 %	67,8 %	-1,3
AVIVA	94,6 %	101,1 %	6,5	30,1 %	31,9 %	1,8	64,5 %	69,2 %	4,7
COVÉA	98,5 %	98,0 %	-0,5	N/A	N/A	N/A	N/A	N/A	N/A
ERGO*	97,9 %	97,0 %	-0,9	33,2 %	35,1 %	1,9	64,7 %	61,9 %	-2,8
GROUPAMA	99,2 %	100,3 %	1,1	40,5 %	41,1 %	0,6	58,7 %	59,2 %	0,5
RSA	96,9 %	94,2 %	-2,7	31,6 %	29,6 %	-2,0	65,3 %	64,6 %	-0,7
UNIPOL	94,6 %	96,5 %	1,9	28,2 %	28,5 %	0,3	66,4 %	68,0 %	1,6
R+V	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SAMPO GROUP	85,4 %	84,4 %	-1,0	13,0 %	16,6 %	3,6	72,4 %	67,8 %	-4,6
CRÉDIT AGRICOLE ASSURANCE	0	0	0	N/A	0	N/A	N/A	0	N/A

Source: MAPFRE Economic Research (with data from the groups' annual reports)

* This refers to the combined ratio for the Property & Casualty business in Germany.

Combined ratio

In 2016, the combined ratio of nine of the groups improved thanks to the lower claims ratio. Groups such as Zurich (-5.2) and Sampo (-4.6) saw the greatest drop because of fewer catastrophic and weather-related events in 2016 when compared to 2015 (see Table 1.2-b). However, this last decrease did not occur in companies affected by the storms and flooding in May/June in France and by the earthquakes in Italy in the second half of 2016 (Groupama, Unipol and Aviva). As for the expense ratio, groups such as Sampo (+3.6), Ergo (+1.9) and Aviva (+1.8) saw bigger rises than groups with positive performance, such as MAPFRE (-1.2) and RSA (-2.0).

Aviva and Groupama's combined ratio is over 100 and, together with Unipol, these groups are the only ones where the expense and loss ratios have worsened.

1.3. Life Ranking

Size and Growth

In 2016, Life insurance performed well in emerging markets, especially in China. In Latin America, Life premiums grew in local currency in most countries. In advanced markets, this segment has slowed down and even dropped in several European countries. In general, savings products were affected by the low interest rates and the volatility of financial markets.

The aggregate premium volume of the 15 largest European Life insurers included in this study amounted to 374 billion euros in 2016, which represents a slight 0.2 percent increase on the previous year (see Table 1.3-a). In absolute terms, the highest-growth groups were LegalGeneral with 3,833.8 million euros, followed by Poste Vita, AXA and Zurich. This growth offsets lower issuing in groups such as Generali (-3,567 million euros) and Prudential (-3,204.7 million euros), in second and third place in the ranking respectively. In the case of Prudential, premiums went up by 6.3 percent in pounds.

AXA is still at the top of this ranking with a premium volume of 58,814 million euros, representing an increase of 2.6 percent on the previous year. This growth derives from the group's operations in the emerging markets of China and Hong Kong. The other groups remained in the same places: Prudential, CNP, Crédit Agricole, Allianz, Aegon, Aviva, Talanx and Zurich. Changes start from the eighth position onward: Poste Vita and BNP Paribas Cardif changed places, with the Italian group climbing two positions to eighth place and the French group dropping to tenth. Additionally, LegalGeneral saw strong growth in premiums and moved up three positions to 12th place, while Swiss Life fell two places and Sogecap slipped one position.

Table 1.3 shows Prudential as the insurer with the highest growth between 2006 and 2016 (23,740 million euros), with double digit increases on several occasions. The British group has significant operations in Asia, the US and the UK. Its strategy in these three markets has been consistent over time and focused on

three long-term objectives: to meet the protection and investment needs of the growing middle class in Asia, to offer savings and retirement products to "baby boomers" in the US, and to meet the savings and retirement needs of older UK residents.

Poste Vita also saw a significant increase in the years under analysis (13,831 million euros). This group is a subsidiary of Poste Italiane, which offers integrated communication, logistics and financial services in Italy via the network of post offices, its website and its helpline. Its business is organized into four segments: postal services, financial services, asset and insurance management services, and other services. As for insurance, Poste Vita groups its businesses together in this segment and has been performing well since 2009, with major increases in its Life premium volume over the years.

On the other hand, Aviva registered the biggest drop between 2006 and 2016 (-6,222 million euros), as a result of several disinvestments over the last few years. In mid-2012, the group drew up a new strategic plan with an ambitious program to reach a more solid and stable position with better results. Following its strategy of focusing on fewer businesses, Aviva sold several businesses, such as its US business. Life insurance premiums grew in the last three years, with an increase of 5.2 percent (19.4 percent in pounds) in 2016 when compared to 2015. In April 2015, Aviva acquired the British company Friends Life.

Table 1.3
Life Market: overall ranking of European insurance groups, 2016
 Ranking by premium volume

	Group	Country	Premiums (million euros)					%Δ premium 2006-2016	%y/y premium 2006-2016 (annual average)	% y/y premium 2015-2016
			2006	2015	2016	Δ 2006 -2015	Δ 2015- 2016			
1	AXA	France	48.793	57.343	58.814	8.550,0	1.471,0	20,5 %	1,9 %	2,6 %
2	GENERALI	Italy	44.962	53.297	49.730	8.335,0	-3.567,0	10,6 %	1,0 %	-6,7 %
3	PRUDENTIAL	United Kingdom	23.698	50.642	47.438	26.944,4	-3.204,7	100,2 %	9,1 %	-6,3 %
4	CNP	France	29.674	28.419	28.539	-1.254,9	119,5	-3,8 %	-0,3 %	0,4 %
5	CRÉDIT AGRICOLE ASSURANCE*	France	22.588	26.012	26.392	3.424,0	380,4	16,8 %	1,5 %	1,5 %
6	ALLIANZ	Germany	21.614	25.237	24.929	3.623,0	-308,0	15,3 %	1,4 %	-1,2 %
7	AEGON	Netherlands	21.768	19.583	20.400	-2.185,4	817,4	-6,3 %	-0,6 %	4,2 %
8	POSTE VITA	Italy	5.989	18.145	19.820	12,156, 2	1.674,8	230,9 %	21,0 %	9,2 %
9	AVIVA	United Kingdom	25.386	18.215	19.164	-7.170,9	949,3	-24,5 %	-2,2 %	5,2 %
10	BNP PARIBAS CARDIF	France	13.870	19.195	17.981	5.324,4	-1.213,8	29,6 %	2,7 %	-6,3 %
11	TALANX	Germany	7.716	14.067	13.431	6.351,4	-636,0	74,1 %	6,7 %	-4,5 %
12	LEGAL&GENERAL	United Kingdom	6.286	8.731	12.565	2.444,8	3.833,8	99,9 %	9,1 %	43,9 %
13	ZURICH	Switzerland	8.126	11.068	12.145	2.941,4	1.077,2	49,5 %	4,5 %	9,7 %
14	SWISS LIFE	Switzerland	8.876	12.509	11.812	3.632,6	-697,2	33,1 %	3,0 %	-5,6 %
15	SOGECAP*	France	9.651	10.581	10.766	929,8	184,9	11,6 %	1,1 %	1,7 %

Total Top 5	169.715	215.714	210.913	45.998,5	-4.800,8
Total Top 15	298.999	373.045	373.926	74.045,9	881,7

Source: MAPFRE Economic Research (with data from the groups' annual reports)

*/ The 2016 premium volume for this segment is indicated in its SFCR

2. Solvency Ratios

In terms of solvency levels, July 2017 marked the deadline for publishing the first Solvency and Financial Condition Report (SFCR) for European Union groups. This is the first full-year report since Solvency II was implemented, as per the new risk-based prudential regulations in force in the European Union since January 1, 2016. It should be noted that the situation of groups in the ranking is sound; seven of the groups have eligible own funds of over twice the

mandatory solvency capital required from the group. As for the Swiss groups, the ratios derive from the internal models applied under the "Swiss Solvency Tests"³ (see Table 2).

Table 2
Solvency ratios of the European insurance groups included in the ranking, 2016

Group	Country	Solvency ratio
COVÉA	France	351 %
POSTE VITA	Italy	295 %
GROUPAMA	France	289 %
UNIPOL	Italy	243 %
TALANX*	Germany	236 %
ALLIANZ	Germany	218 %
MAPFRE	Spain	210 %
AXA	France	197 %
R+V	Germany	188 %
GENERALI	Italy	178 %
CNP	France	177 %
AVIVA	United Kingdom	172 %
PRUDENTIAL	United Kingdom	171 %
LEGAL&GENERAL	United Kingdom	163 %
CRÉDIT AGRICOLE ASSURANCE	France	161 %
SWISS LIFE**	Switzerland	160 %
RSA	United Kingdom	158 %
AEGON	Netherlands	157 %
SAMPO GROUP	Finland	155 %
SOGECAP	France	154 %
BNP PARIBAS CARDIF	France	146 %
ZURICH***	Switzerland	122 %
ERGO****	Germany	N/A

Source: MAPFRE Economic Research (with data from the groups' SFCRs)

*/ Solvency II ratio extracted from the SFCR for HDI-Group, of which Talanx Group is the main risk core.

**/ Swiss Life presents a solvency ratio as per the internal model compliant with the Swiss Solvency Test authorized by FINMA on December 31, 2016.

***/ The solvency ratio published by Zurich derives from the internal model Z-ECM; for values around 120 percent, it looks for a rating target AA (in Solvency II, this would be a ratio of around 196 percent approximately)

****/ ERGO does not present a specific solvency ratio since it is part of the Munich Re group.

3. Convergence Analysis

3.1 Convergence Analysis

The analysis in this section centers around the trend growth differential shared by a group of competitors (in the respective ranking) vs. trend growth of the overall market ("overall market" meaning the groups that make up the full ranking).

Given the dynamics of this growth differential, a distinction is made between "converging" insurance groups (their trend growth differential reduces over time until it disappears); "diverging" groups (their growth differential broadens over time), and "neutral" groups (their differential is insignificant when compared to the market's trend growth). These convergence categories are analyzed in the instances considered for the ranking: overall, Non-Life and Life (see Charts 3-a, 3-b and 3-c).

Life Segment

In the specific case of the Life segment (Chart 3-c), there is a "converging" group (made up by AXA, CNP, BNP Paribas Cardif and Talanx) which went from a trend growth much higher than the market in 2006 to growth rates practically similar to the market in 2016. On the opposite side, there is a "diverging"-positive group (Prudential, Poste Vita, Aviva, LegalGeneral and Swiss Life) whose trend went from maintaining a growth differential lower than the market in 2006 to exceeding the market's growth in 2016. Lastly, the "neutral" group (Generali, Crédit Agricole Assurance, Allianz, Aegon, Zurich and Sogecap) maintains a zero trend growth differential when compared to the market's overall trend, i.e. growth is at the same rate as the market's general trend.

Given the size of the "neutral" group's business, it becomes evident that the market's overall growth rate is determined by this subset; and the market's overall secular dynamics (pace determined by the members of this group) is for a replacement process to occur in the convergence process whereby the "converging"

group loses ground in favor of the "diverging"-positive group.

Non-Life Segment

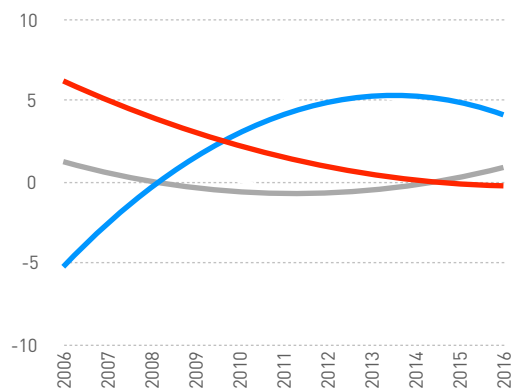
For Non-Life (Chart 3-b), there is a "converging" group (AXA, Allianz, Generali, MAPFRE, CNP, Crédit Agricole Assurance, Unipol, Sampo Group, Groupama, RSA, Ergo and Covéa), which has gone from growing in excess of the market to matching its growth rate. In turn, the "diverging"-positive group (R+V, Aviva and Zurich) went from lower growth than the market to exceeding its trend growth rate. In other words, the Non-Life segment dynamics include a replacement process over the last decade whereby the large groups start growing less than smaller groups.

Overall Market

The joint dynamics of "converging" and "diverging" groups in Life and Non-Life segments result in the sector's overall dynamics (Chart 3-a). This chart shows that the "converging" group (CNP, Generali, Talanx, MAPFRE, Covéa and BNP Paribas Cardif) went from growth rates above the market to matching its growth. Analytically speaking, the excess trend growth for this group in 2008 equals the sum of the excess in the Life and Non-Life segment, which reflects the relative similar size of these businesses at the time.

The "diverging"-positive group is made up by Zurich, Aviva, Prudential and Poste Vita. As a result of the shared dynamics in Life and Non-Life segments, the overall market went from growing below the overall trend to exceeding it. The "neutral" group (Ergo, Crédit Agricole Assurance, Allianz, AXA and Aegon) determines the trend growth of the overall market.

Chart 3-a
Total: analysis of market convergence



Converging:

CNP, GENERALI, TALANX, MAPFRE, COVÉA, BNP PARIBAS CARDIF

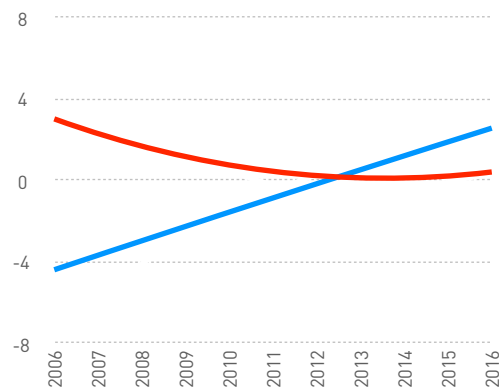
Diverging:

ZURICH, AVIVA, PRUDENTIAL, POSTE VITA

Neutral:

ERGO, CRÉDIT AGRICOLE ASSURANCE, ALLIANZ, AXA, AEGON

Chart 3-b
Non-Life: analysis of market convergence



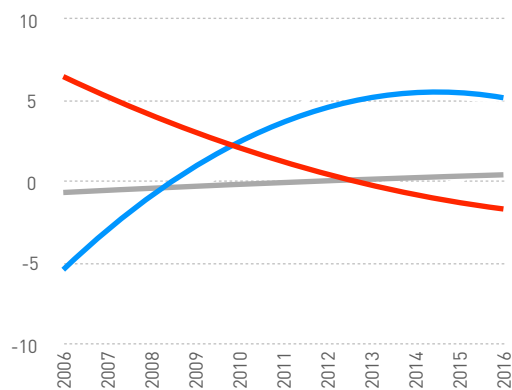
Converging:

AXA, ALLIANZ, GENERALI, MAPFRE, CNP, CRÉDIT AGRICOLE ASSURANCE, UNIPOL, SAMPO GROUP, GROUPAMA, RSA, ERGO, COVÉA

Diverging:

R+V, AVIVA, ZURICH

Chart 3-c
Life: analysis of market convergence



Converging:

AXA, CNP, BNP PARIBAS CARDIF, TALANX

Diverging:

PRUDENTIAL, POSTE VITA, AVIVA, LEGALGENERAL, SWISS LIFE

Neutral:

GENERALI, CRÉDIT AGRICOLE ASSURANCE, ALLIANZ, AEGON, ZURICH, SOGECAP

Source: MAPFRE Economic Research

3.2 Analysis of Market Developments

Overall Market

Growth

In historical terms (see Chart 3-e), the highest accumulated growth happened in the smallest insurance groups in 2006 (measured in premium volume). This fact reflects the convergence dynamics of insurance market players and it is particularly evident in the case of Poste Vita and MAPFRE, supporting the view described above.

Chart 3-g confirms that, overall, the year-on-year growth rate in 2015-2016 was slightly negative (-0.8 percent), in contrast to the average growth of the overall market over the last decade (+2.2 percent), and a sign of the slowdown in the last few years.

In fact, the current contraction (2015-2016) of the overall market (see Table 1.1-a and Chart 3.-d) was around 4.5 billion euros. The main reason for this was the contraction of activity of four of the five largest insurance groups (in total, they have foregone 7.5 billion euros), which was not balanced out by the increase of 6.5 billion euros of the insurance groups with positive growth in the period. Chart 3-f shows that, in 2016 and in aggregate terms, the overall market grew below its long-term trend, just after reaching its most recent cyclical high in 2015.

Cyclical Moment

The aforementioned slowdown of the overall market in the last year is evident in the fact that the aggregate figure for current business is growing below its secular trend, evidence of a negative cyclical moment that may not yet have reached its valley. Here, only Aegon and MAPFRE grew in excess of the secular trend in 2016 and, consequently, their cyclical moment is positive (see Chart A-1 in this report's appendix), whereas the other insurance groups are in a negative cycle.

Non-Life Segment

Growth

In general terms and similarly to what has happened to the overall market, Chart 3-i shows that the Non-Life insurance groups with the lowest business volume (measured in premiums in 2006) have the highest accumulated growth rates in the decade. In turn, larger groups managed lower cumulative growth.

The year-on-year growth rate in 2015-2016 for the Non-Life segment was only slightly positive (-0.1 percent). As with the overall market, this contrasts against the average growth of the whole market (+2.3 percent) in the last decade, a sign of the slowdown over that last 10 years (Chart 3-k).

However, the Non-Life segment did not see a market contraction (see Table 1.2-a and Chart 3-h) in 2015-2016 or the 10 previous years. Over the last year, it grew 156.4 million euros.

Cyclical Moment

Chart 3-h shows that almost all Non-Life insurance groups increased their activity in 2015-2016 (albeit very moderately) with the exception of some groups that do not use the euro to present their consolidated figures (currency depreciation has resulted in year-on-year contraction of premium growth).

In spite of the general growth of all groups (only Aviva, Groupama and RSA registered negative year-on-year rates in 2006-2016), the year-on-year rate for each insurance group in 2015-2016 is considerably lower than the average growth rate in the last decade (see Chart 3-k). In fact, Chart 3-j shows that, in aggregate terms, the overall market grew below its long-term trend, after reaching its most recent cyclical high in 2015.

In addition, when analyzing the charts that show the cycle and trend of each group in the Non-Life ranking (see Chart A-2 of the appendix), it is evident that premium volume grew over the trend only in a few cases (R+V, Unipol and Ergo). This is especially significant when considering that the average growth of the 15 largest Non-Life insurance groups in

Chart 3-d
Overall market: market size and growth in 2016 (million euros)

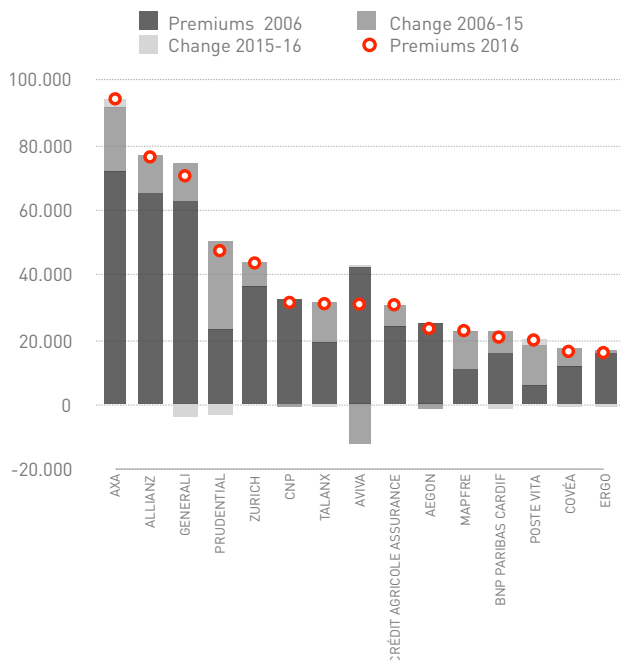


Chart 3-e
Overall market: %Δ premium (CAGR 2006-2016, %) vs. size (million euros)

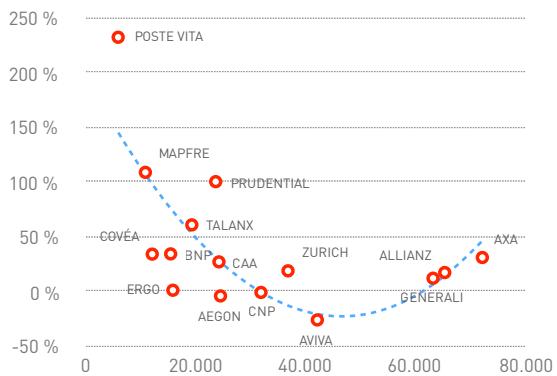


Chart 3-f
Overall market: sector cycle and trends

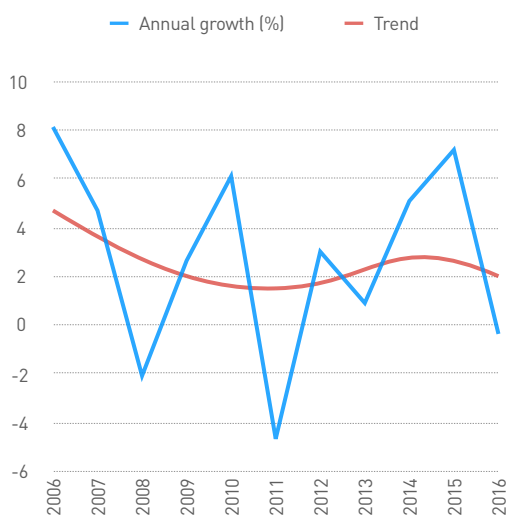
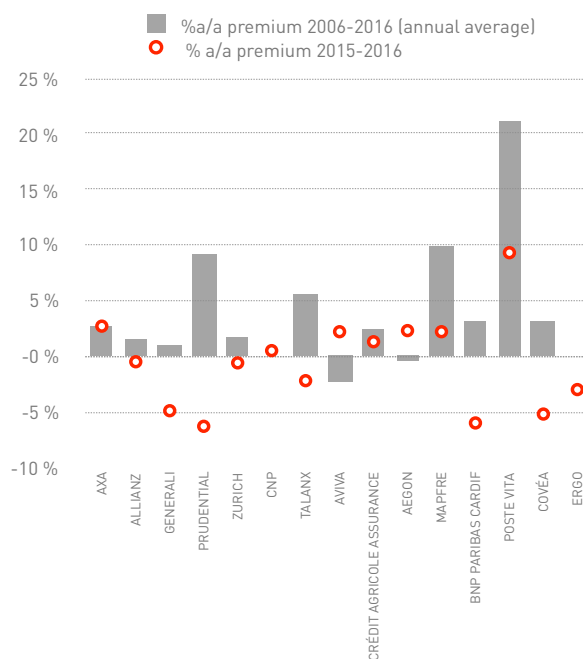


Chart 3-g
Overall market: growth rates



Source: MAPFRE Economic Research (with data from the groups' annual reports)

Chart 3-h
Non-Life Market: market size and growth in 2016 (million euros)

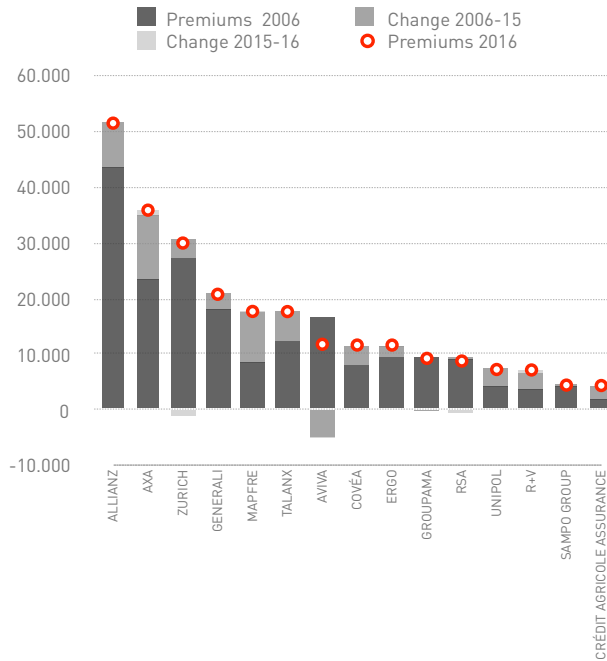


Chart 3-i
Non-Life Market: %Δ premium (CAGR 2006-2016, %) vs. size (million euros)

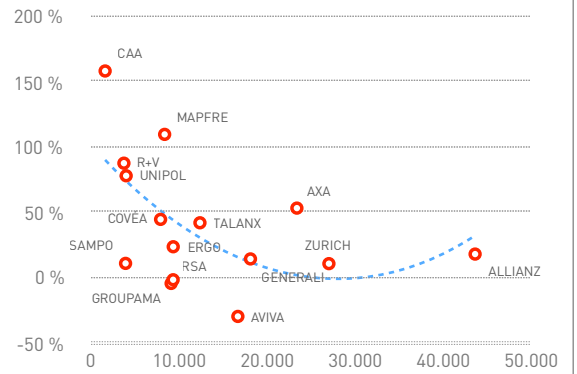


Chart 3-j
Non-Life Market: sector cycle and trends

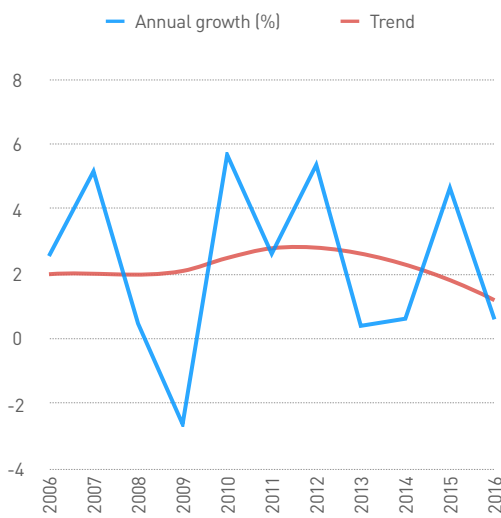
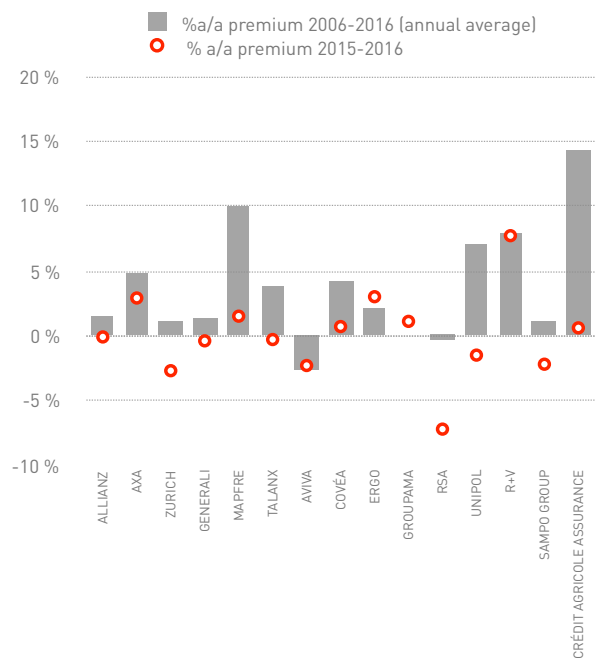


Chart 3-k
Non-Life Market: growth rates



Source: MAPFRE Economic Research (with data from the groups' annual reports)

2015-2016 was only 0.1 percent, while their historical average annual growth (2006-2016) was around 2.3 percent. Consequently, it is clear that there is a generalized cyclical slowdown. This loss of dynamism is due to the convergence process of most of the market (see above), among other factors.

A detailed analysis (see Chart A-3 of the appendix) shows that all European Life insurance groups under analysis grew less than their secular trend, except for LegalGeneral and Aegon. Lastly, the convergence process described for the Non-Life segment also applies to the Life business.

Life Segment

Growth

Table 1.3 and Charts 3-l and 3-o show moderate growth of 11 of the 15 largest Life insurance groups in 2015-2016. There has been a higher number of groups with visible business contraction during the period; at the same time, there was a slight slowdown when compared with the historical average growth (0.2 percent for the entire ranking in 2015-2016 vs. 2.3 percent on average in the previous 10 years). This is partly due to the latest evidence of strong moderation of the Life business over the last two years as a result of low interest rates.

As has happened with the Non-Life segment, smaller insurers registered the strongest secular growth over the last decade (see Chart 3-m), especially Poste Vita which more than doubled in size over the last 10 years.

Cyclical Moment

As with the Non-Life ranking, the 15 largest Life insurance groups grew less than their current trend (Chart 3-n) and are experiencing a negative cyclical moment, which reflects the macro-economic circumstances described above. However, this situation can be expected to change when the current European business alters its composition following the more-than-likely future standardization of monetary policy in the Eurozone.

Chart 3-l
Life Market: market size and growth in 2016 (million euros)

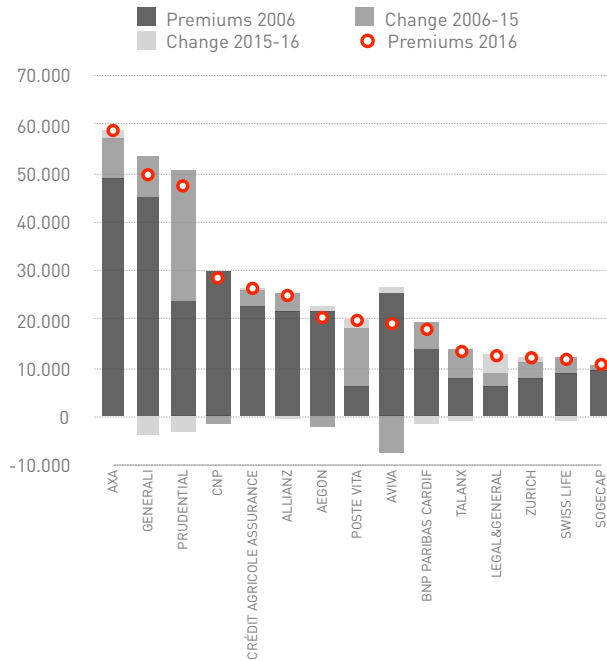


Chart 3-m
Life Market: %Δ premium (CAGR 2006-2016, %) vs. size (million euros)

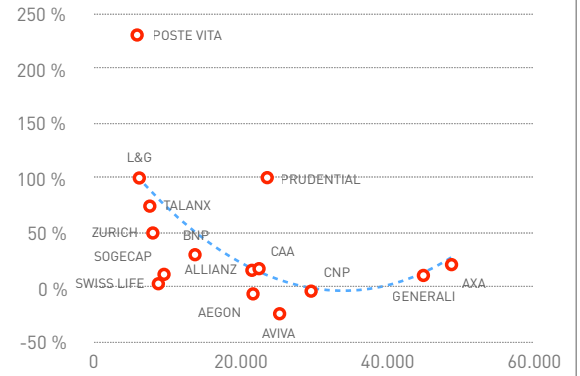


Chart 3-n
Life Market: sector cycle and trends

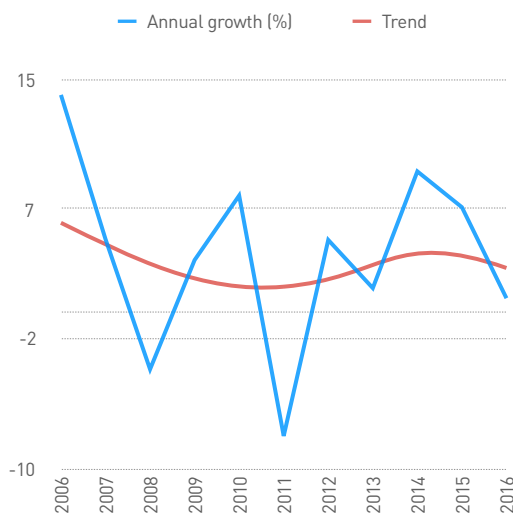
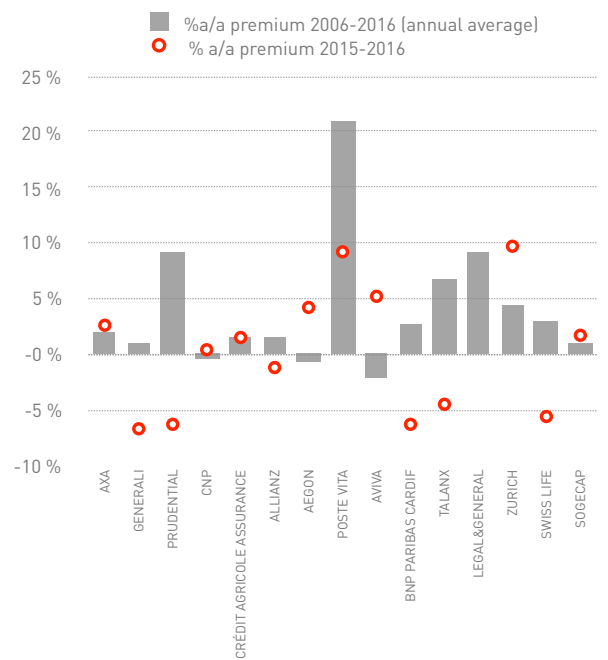


Chart 3-o
Life Market: growth rates



Source: MAPFRE Economic Research (with data from the groups' annual reports)

Data and Metrics

Source of data

As in previous years, this ranking was prepared with information published by the insurance groups themselves in their annual reports and in their Solvency and Financial Condition reports (SFCR). The ranking was built from the gross written premiums for each group overall.

Sample

For the period under analysis (from 2006 to 2016), the sample has systematically been formed of the 15 largest European insurance groups overall, and for the Life and Non-Life segments. Since the weight of these insurance groups on the overall global and European insurance market is not known, unlike the report on insurance groups in Latin America,⁴ this report does not analyze the market size or its concentration levels. Instead, it analyzes the cyclical and secular dynamics of the insurance sector in Europe (from a sample of this list of insurance groups), using a dynamic premium analysis.

Intertemporal comparability

The dynamic analysis was undertaken assuming a constant sample of participants over time. After the ranking by premium volume for 2016 was put together, the same information was collected for each group regarding 2006-2015. This was done in order to verify the variation of each group until they reached their current position. Additionally, this dynamic analysis used the data published by the groups in their annual reports, while – for comparison purposes – the 2015 revenue and profit or loss figures published in the 2016 annual reports were updated.

Metrics

The integrated analysis of this report aims to establish some kind of static and dynamic ordinal classification of European groups that show a global business vocation. This can be analyzed from an exclusively static perspective (with a ranking of size based on premiums) and also from a dynamic perspective which provides a view on the dynamics of market players by identifying ad-hoc dynamics for each group, trends shared by all and the convergence in growth. In other words, the dynamics that have determined the current relative order of the ranking.

Consequently, the weight of each group in the ranking is measured according to its premium size, in euros and in the current year (in this case, 2016) and during the previous decade (2006-2015). This leads to a perspective on the historical premium growth ($\Delta 2006-2015$ and $\Delta 2015-2016$) until now, by separating the secular variation over the last decade (the trend) and the variation in the last year (with more of a link to the economic cycle). After the premium figures (in euros) were determined for the period in question and year-on-year growth rates for each historical series were calculated, the growth path was broken down into the trend and cyclical components. The trend was determined using a Hodrick-Prescott filter, which applies a Lambda parameter of 6.25. This is consistent with the parameter used to extract the GDP trend of developed countries on an annual basis; premiums of European insurers are assimilated as consumption, which requires a similar parameter for an annual frequency.

Charts 3-d, 3-h and 3-l show the premium value in 2006, the gross increase during 2006-2015 and the increase in premiums until 2016. Charts 3-g, 3-k and 3-o compare the growth rate over the last year against the historical average growth to foresee acceleration or slowdown patterns in the business of each of the groups.

Additionally, the extracted trend of each of the growth series for the insurance groups is used to calculate the growth trend of each group in each of its businesses and to compare the convergence between the groups and the overall market (i.e. all of the groups). These metrics can be found in Charts 3-e, 3-i and 3-m where shared trends are compared. Charts 3-f, 3-j and 3-n show the graphical analysis of the exposure of the sector's trends (the sample) with the trends of each group in the appendix to this report (Charts A-1, A-2 and A-3).

Exchange rates used

To calculate premiums and profit or loss, the average exchange rate for the year was used. For balance sheet figures, the end-of-period exchange rate was used, as shown below:

Euro (EUR) vs.	2006	2015	2016
Pound sterling (GBP)			
Average	1,4667	1,3813	1,2169
End of period		1,3763	1,1716
US dollar (USD)			
Average	0,7926	0,9057	0,9054
End of period		0,9206	0,9508
Swiss franc (CHF)			
Average	0,6359	0,9317	0,9169

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1/ In order to do so: a) the secular growth rates are compared against the current growth rate; b) the recent premium increase is compared against the increase over the last decade; and c) the cyclical part of the trend is separated in the premium growth dynamics for each specific case and for the market in general, as well as for the Life and Non-Life segments.

2/ In October 2012, it announced that it was selling this subsidiary to Alpha Bank.

3/ For comparison purposes, it should be noted that the solvency ratio published by Zurich derives from the internal model Z-ECM. For values around 120 percent, it looks for a rating target AA. AA. In Solvency II, this would be a ratio of around 196 percent approximately. ERGO does not report a solvency ratio since it is part of the Munich Re group.

4/ See: MAPFRE Economic Research, *Ranking of insurance groups in Latin America 2016*, Madrid, Fundación MAPFRE, June 2017.

Appendix

Graphical Analysis of Cycle and Trend

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Chart A-1
Overall market: Graphical analysis of cycle and trend by insurance group.



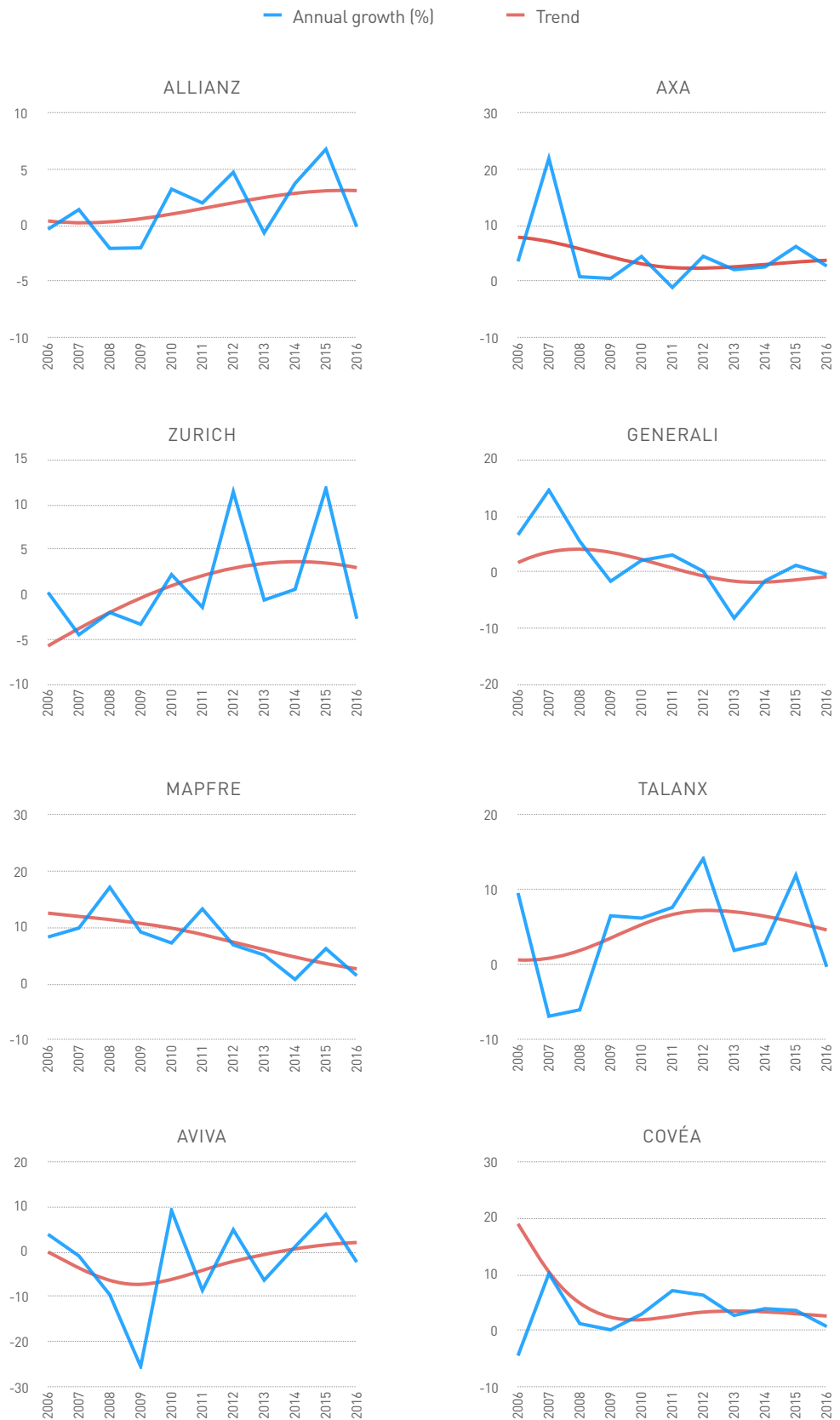
Source: MAPFRE Economic Research

Chart A-1 (continued)
Overall market: Graphical analysis of cycle and trend by insurance group.



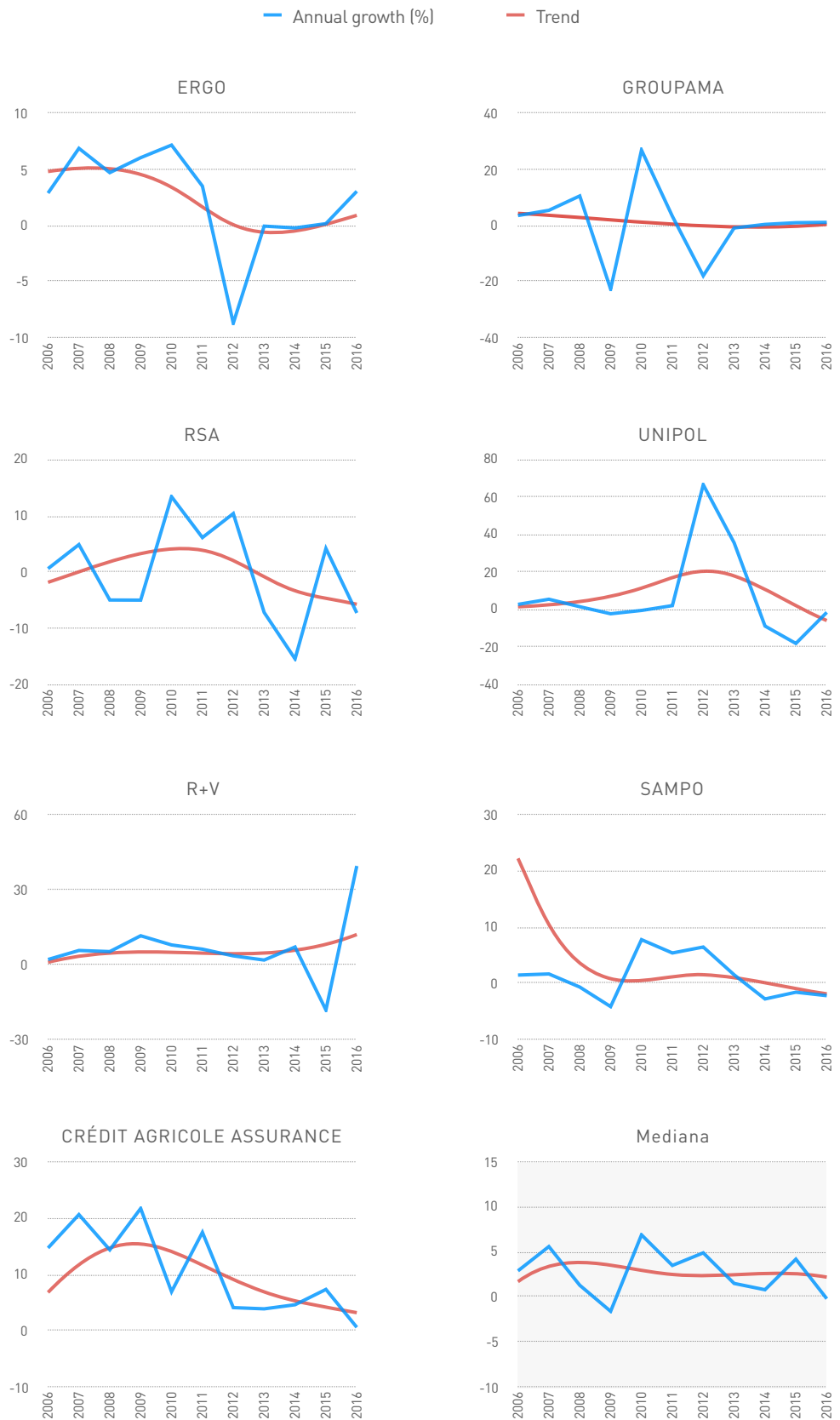
Source: MAPFRE Economic Research

Chart A-2
Non-Life Market: Graphical analysis of cycle and trend by insurance group.



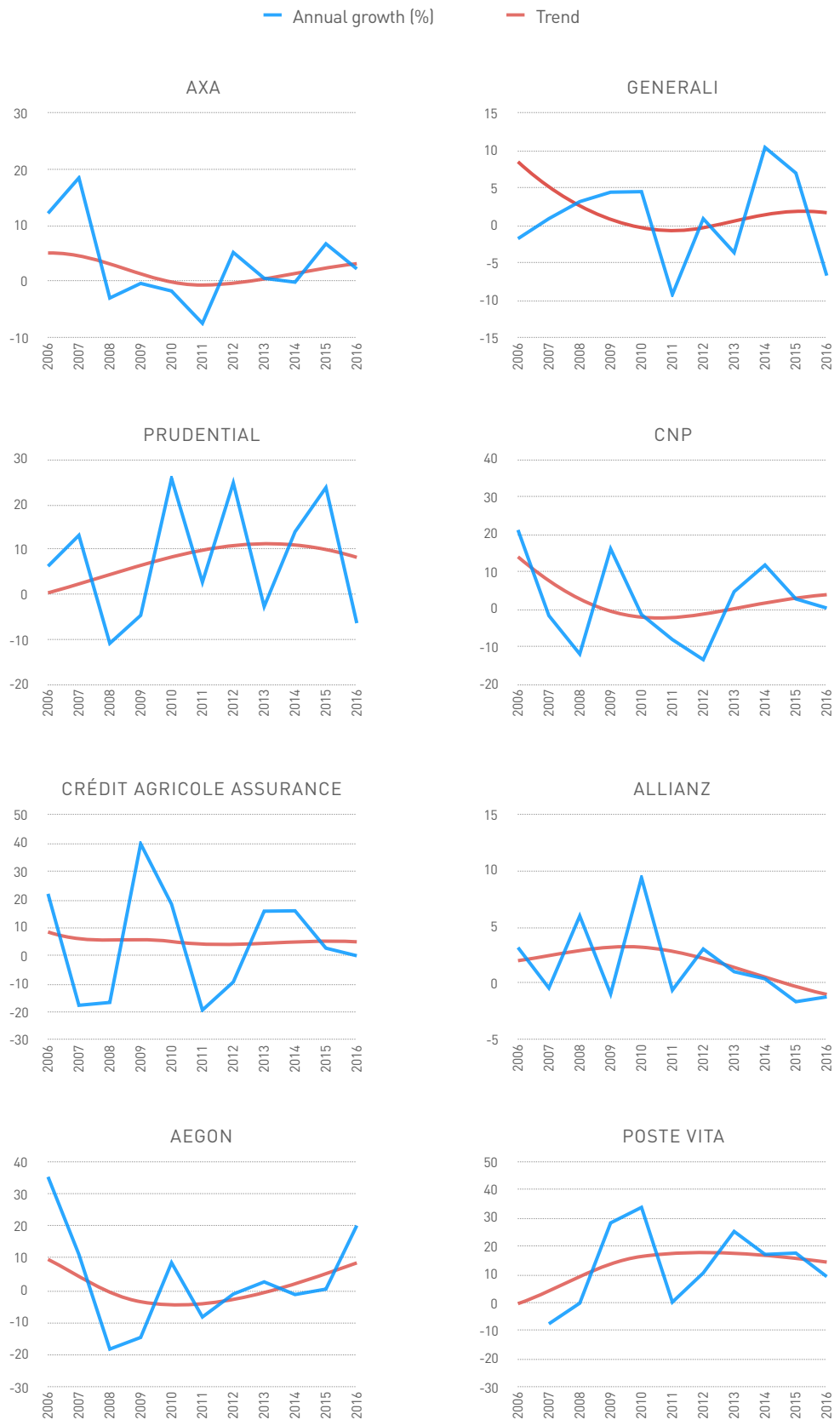
Source: MAPFRE Economic Research

Chart A-2 (continued)
Non-Life Market: Graphical analysis of cycle and trend by insurance group.



Source: MAPFRE Economic Research

Chart A-3
Life Market: Graphical analysis of cycle and trend by insurance group.



Source: MAPFRE Economic Research

Chart A-3 (continued)
Life Market: Graphical analysis of cycle and trend by insurance group.



Source: MAPFRE Economic Research

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