MAPFRE GIP 2019

Fundación MAPFRE

GLOBAL INSURANCE POTENTIAL INDEX

MAPFRE Economic Research

MAPFRE GIP 2019

Global Insurance Potential Index (2019 update)

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MAPFRE Economic Research

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Introduction

Following the analysis carried out by MAPFRE Economic Research, this report presents an update of the Global Insurance Potential Index (MAPFRE GIP) for 96 emerging and developed insurance markets, which was originally proposed in 2018.

As in our previous report, on the basis of an analysis of the economic and demographic factors that determine the growth of the Insurance Protection Gap, and the measurement of the capacity to close the insurance gap in each market (rate of convergence with the penetration and density levels of developed markets), the MAPFRE GIP measures this potential based on the ability of countries to create an insurance gap and use it to effectively expand the insurance market.

In this way, the MAPFRE GIP allows the markets to be ordered according to their potential contribution to closing the global insurance gap, offering a comparative view of the global potential for the expansion of the insurance industry in the coming years.

We hope that this report will contribute to a better understanding of the functioning of the insurance market, so that the insurance industry may be better equipped to continue to expand its relevance in the global economy.

MAPFRE Economic Research

1. Methodological aspects

When talking about global economic development, in broad terms, there continue to be major disparities around the world, which most likely have a significant effect on financial stability, economic growth and decreasing inequality[1].

To understand the measure of these differences, and therefore of the margin for improvement in these areas, MAPFRE Economic Research[2] links this margin for improving stability, economic development and equity with the development potential of the insurance industry, which is measured using the MAPFRE GIP Index (Global Insurance Potential Index), as detailed in the first report in this series[3]. This is summarized below.

The insurance gap and insurance potential

As stated in our 2018 report, the MAPFRE GIP Index uses the Insurance Protection Gap (IPG) to monitor and compare the development of the insurance industry in different countries. The IPG measures the gap between a fully developed level of insurance and the level that actually exists in any given country. In other words, the IPG in a region or country represents the difference between the insurance coverage that is economically necessary and beneficial to society and the amount of coverage that is actually acquired. Thus, it is the difference between the level of insurance coverage in an ideal situation (defined by a theoretical benchmark) and the level actually reported in each individual market. Calculating the IPG helps to determine the potential market for insurance, which is the attainable market size should the gap disappear. In this way, the IPG is not a static concept, but rather it evolves in accordance with both the growth of a country's economy and population, and with the emergence of new risks inherent to continuing economic and social development.

Here "insurance potential" means the capacity of a country not only to generate new scope for insurance in the course of its socioeconomic development (i.e. to create an insurance gap), but also its ability to then reduce this gap thanks to an increasing level of insurance penetration in its market, and as a result, help to narrow the global IPG. In general terms, the insurance gap can be measured using two approaches. The first, in an ex post focus, is based on observed losses. In this case, the IPG is the difference between the economic losses recorded in a specific period and the portion of said losses that were covered through the mechanism of insurance compensation. The second, in an ex ante focus, analyzes the optimal levels of coverage, estimated as the difference between the socially and economically suitable level of risk coverage compared to the actual level of coverage.

For the fiscal year examined in this report, in keeping with the methodology followed in other reports prepared by MAPFRE Economic Research, we applied the latter of the two approaches, i.e. using the market penetration differential (premiums compared to GDP) between the market concerned and a theoretical benchmark.

Ultimately, a greater capacity to create and close the global IPG reflects a greater insurance potential in any given country and, therefore, potential gains in terms of economic growth, financial stability and well-being.

Elements of the MAPFRE GIP

For the purposes of updating the estimated MAPFRE GIP Index, which uses figures from year-end 2018, IPG trends are monitored across a sample of 96 insurance markets (approximately two thirds emerging markets and one third developed markets), as well as the underlying variables that are considered instrumental for the insurance gap trend. As established in the last edition of this report, these factors may take the form of initial conditions, or growth differentials of set explanatory variables with respect to a benchmark[4], and may relate positively or negatively to the IPG[5]. These factors are as follows:

a) the existing IPG in each country;

b) the relative penetration (insurance premiums compared to GDP);

c) the elasticity of insurance demand in terms of the economic cycle;

d) the relative GDP per capita;

e) the size of the population;

f) the growth gap in terms of population; and

g) the growth gap in terms of GDP.

The level and development of these variables will determine the insurance potential of each market, and shall be reflected in the following markers: the GAI (Gap Absorption Index) and the MAPFRE GIP (Global Insurance Potential Index)[6]. The corresponding methodological details can be found in the report: MAPFRE Economic Research (2018), Global Insurance Potential Index, Madrid, Fundación MAPFRE.

The benchmark used

Using figures from year-end 2018, for the purposes of the analysis, the Dutch insurance market has been used as the benchmark to estimate the MAPFRE GIP. The penetration of this market places it in the 90th percentile of the distribution of global insurance penetration for the Life and Non-Life segments. Since this market is the benchmark for comparing levels of penetration, it is also the benchmark for establishing relative data on the levels and growth rates of per capita income and population.

GAI

The Gap Absorption Index (GAI) is an intermediate measure that provides a scoring system and a ranking based on each market's potential for closing its insurance gap, which can indicate the rhythm at which the market can converge with the levels of penetration and density of the benchmark selected.

MAPFRE GIP

The MAPFRE GIP (Global Insurance Potential Index) provides a scoring system designed to put each market in order on the basis of its potential contribution to closing the global insurance gap (measured in basis points of the global GDP or as a percentage of the total insurance market), thus making it a way of measuring the "size of the market."

2. Analysis of the insurance gap and elements of the MAPFRE GIP

The Insurance Protection Gap

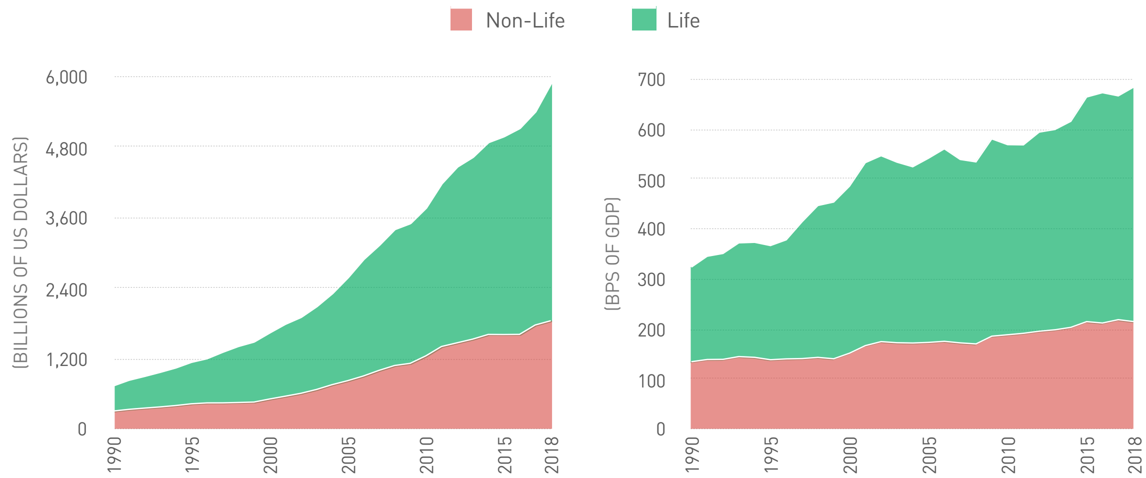
The total global insurance gap (Life and Non-Life), calculated using figures from 2018, stood at 5,878 billion US dollars, equivalent to 685 basis points (bps) of the global gross domestic product (GDP). This is distributed into approximately two thirds for the IPG in the Life insurance segment and one third for the IPG in the Non-Life segment (470 bps and 215 bps, respectively), which represents an increase of 27 bps and 6 bps compared to the IPG registered in 2017, respectively[7].

In the last year, the total insurance gap grew 2.7%, as a result of growth of 4.9% in the Life segment and a contraction of -1.9% in the Non-Life segment (see Charts 2-a and 2-b). The differential increase in the IPG of the Life segment is mainly explained by the case of emerging markets, and in particular the BRICS economies[8], where there was a greater disconnect between the trends of fundamentals and premiums, resulting in a growing "infra-insurance."

Measured in terms of business size, the insurance gap in the Life insurance segment accounts for between 7 times (for BRICS) and 10 times (for other emerging markets) the insurance business, while in developed markets it accounts for slightly less than 2 times the insurance business. In the case of the Non-Life segment, the IPG of the BRICS and other emerging markets account for 2.4 and 3 times the insurance business, respectively, while in developed markets this factor is no higher than 20 bps of the insurance business.

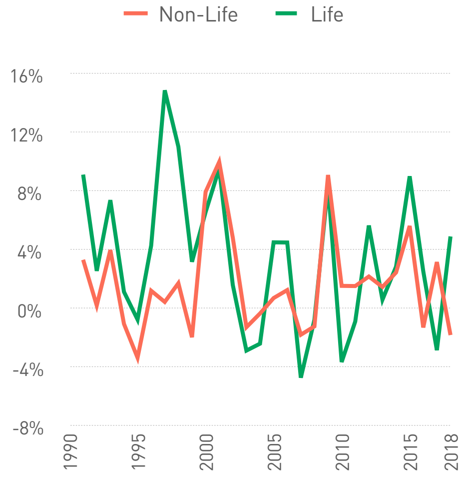
It should be noted that between 2017 and 2018, the Life business saw BRICS expand their IPG, while in other emerging markets the gap was reduced by a similar amount (-15 bps vs. +20 bps). In the Non-Life business, the insurance gap was widened solely by the increase in other emerging markets, while in the remaining markets it stayed the same as in 2017 (see Charts 2-c and 2-d).

Chart 2-a
Global IPG levels by market segment, 1990–2018
(billions of dollars; basis points of global GDP)



Source: MAPFRE Economic Research

Chart 2-b
Growth of global IPG by market segment, 1990–2018
(annual growth rate, %)



Source: MAPFRE Economic Research

Relative penetration levels

Relative penetration levels (to the benchmark) show clear differences between the Life and Non-Life segments, and between developed and emerging markets[9].

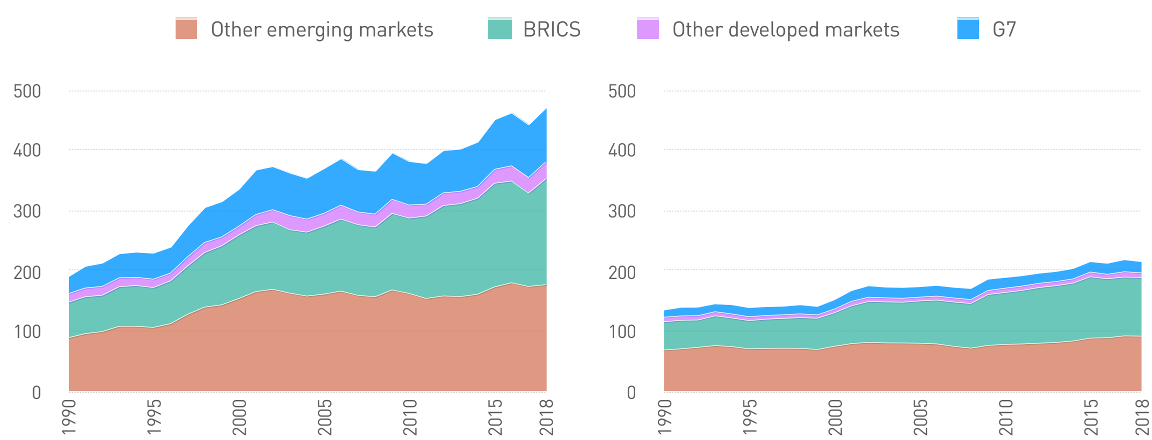
In this regard, the relative penetration with respect to the benchmark in the Life insurance segment is 73% (for G7), 26% (for other developed markets), 22% (for BRICS), and 7% (for other emerging markets). In the case of the Non-Life insurance segment, the relative penetration with respect to the benchmark is 80%, 61%, 40%, and 27%, respectively, for the four groups of countries analyzed.

Compared to last year, the Life insurance segment shows an increase in relative penetration of the BRICS with respect to the benchmark (+3%), which is offset by a contraction in the relative penetration of developed markets. In the Non-Life segment, there are no substantial changes in relative penetration compared to the previous year.

Elasticity of insurance demand in terms of the economic cycle

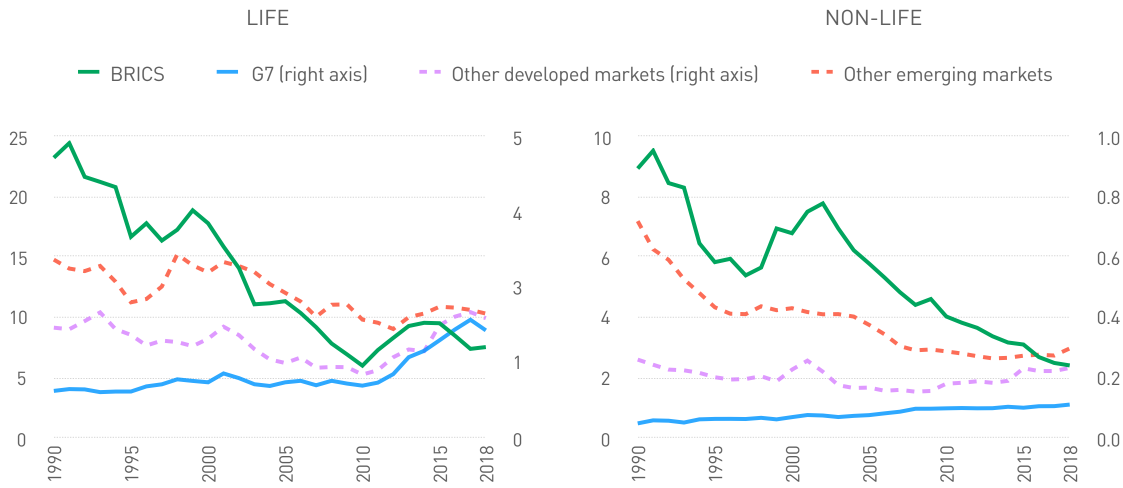
For the purposes of this analysis, it has been assumed that there have been no changes in the elasticity of insurance demand in relation to the economic cycle between the two consecutive years.

Chart 2-c
Global IPG levels by economic region, 1990–2018
(basis points of global GDP)



Source: MAPFRE Economic Research

Chart 2-d
IPG as a proportion of each insurance market, 1990–2018
(number of times real insurance market in each region)



Source: MAPFRE Economic Research

Relative GDP per capita

Using information from year-end 2018, the average GDP per capita in developed countries represents approximately 92% of the GDP per capita of the benchmark, while the average of emerging countries represents 28.5% of the benchmark. Thus, the relative GDP per capita of developed countries fell by 300 bps compared to the previous year, when it represented 95% of the benchmark, while the GDP per capita of emerging countries only contracted by 60 bps (from 29.1% in 2017).

Size of the population

For the purposes of the sample of 96 countries analyzed in this report, the overall population is 6.4 billion people, according to estimates from the United Nations. In this regard, the population in the list of developed countries analyzed grew 0.5% to 946 million people (+4 million), while the population of the emerging countries as a whole grew by 6 million compared to 5.4 million in 2018 (+0.8%). Thus, for the sample analyzed, the average size of an emerging country (78 million) is more than double the average size of a developed country (36.4 million).

Growth gap in terms of population

For the purposes of this report, fertility and life expectancy remain unchanged from one year to the next, and therefore it is assumed that in general, the growth gap in terms of population remains constant in relation to the figures presented in our previous report. The emerging countries have higher population growth than the developed countries, and also higher than the benchmark, although they are converging perennially.

Growth gap in terms of GDP

The GDP growth gap with respect to the benchmark is close to zero for the developed countries, and approximately 250 bps for the emerging countries. It should be noted that these measurements remained unchanged in the period up to 2018.

Initial conditions and growth differentials indicate that there has been an especially significant (although not exclusive) expansion of insurance potential (the IPG) in the emerging markets, although progress has been made in the case of BRICS insurance levels. This means that we should expect Life and Non-Life rankings to continue to be increasingly dominated by these economies and, in particular, by non-BRICS emerging markets that are still of considerable size, have the capacity to converge on income and are still underinsured.

Scores, rankings and levels (Tiers)

The GAI (Gap Absorption Index) scores and the scaling of these scores as part of the global contribution under the MAPFRE GIP (Global Insurance Potential Index) are used to categorize and order the markets analyzed according to their insurance potential. The MAPFRE GIP sets the order by taking into account the size of the market and, therefore, its contribution to closing the global insurance gap.

Based on the elements detailed above, this report presents the 2019 ranking of the MAPFRE GIP Index using figures from both the insurance industry and economic sector from year-end 2018. This index comprises a total of 96 emerging and developed insurance markets in both the Life and Non-Life segments, ordered according to their potential contribution to closing the global insurance gap.

It is worth noting that, by adding information from 2018, revisions and additions are made to the figures reported in previous years. This is especially the case for premiums, and although these revisions do not alter the conclusions made in previous publications, they may lead to minor changes in the ranking positions reported in the previous edition once the index is recalculated with updated data.

The MAPFRE GIP ranking identifies two categories or lists of markets with high insurance potential. The first (Tier 2) includes countries that are placed above the 75th percentile in terms of their insurance potential, and which together represent over 80% of global insurance potential. The second category (Tier 1) is more restricted. This is a sub-group of Tier 2 and comprises countries whose potential is placed above the 95th percentile, and which together account for over 50% of global insurance potential.

In order to be highly placed in the ranking, markets therefore need to be of an appropriate size (measured in terms of their GDP) and also to have an adequate capacity to narrow their own IPG. This means that there are countries with ample capacity to narrow their own gap, but which nevertheless have relatively little economic weight, which places them in a low position in the ranking. However, this report also focuses on this group of countries, since thanks to their converging importance they represent a future source of insurance potential.

3. Results: Life ranking

A glance at the Top 10

Table 3-a lists the Top 10 markets in the Life ranking according to insurance potential measured through the MAPFRE GIP. These include the five countries in Tier 1 (China, the United States, India, Indonesia, and Russia), and the five countries at the top of Tier 2 (Germany, Japan, Brazil, Turkey, and Mexico).

The relative potential of each market is practically the same as the potential registered for these 10 insurance markets in the previous year. It should be noted that the MAPFRE GIP based on the figures from year-end 2017, which was included in our previous report, varied slightly when recalculated using the revised premium figures from 2018 in some countries. However, these changes simply result in an exchange of positions. This happens in very few cases in the Tier 2 list for both the Life and Non-Life segments, and does not affect the comparative reading of the new ranking.

Furthermore, it is important to note that more than half of this potential is attributable to Tier 1 markets, although the importance of the changes in the potential of Tier 2 markets should not be undermined. The 10 countries that lead the MAPFRE GIP ranking make up 68% of the global insurance potential measured by this index, of which 57% corresponds to Tier 1 countries and 11% to Tier 2 countries (see Table 3-b and Table A-1 in the Appendix). These figures which are very similar to those obtained for the previous year.

Although there have been no year-on-year changes, it is interesting to note that over the past 10 years, the insurance markets in Japan and Germany have gained relative positions within the Top 10 list, which is closely linked to the demographic development of both countries. Among the emerging markets, only Turkey and Indonesia gained positions, while Brazil and Russia lost their positions despite maintaining high thresholds. In any case, we should remember that the secular vision offered by this decade is biased because it refers to a cycle starting with the downturn of the Lehman recession and finishing at the global cyclical peak registered in 2018.

Source: MAPFRE Economic Research

Table 3-a
Life: MAPFRE GIP ranking (75+ percentile of 96 countries), 2018

Country	MAPFRE GIP	Ranking			GAI	Years to close the IPG of 2018
		2018	Δ2018–2017	Δ2018–2008		
Tier 1						
China	9.45	1	0	0	50.83	24
United States	4.92	2	0	0	32.79	0
India	4.62	3	0	0	60.02	26
Indonesia	1.19	4	0	2	46.46	29
Russia	1.08	5	0	-1	36.88	21
Tier 2						
Germany	0.98	6	0	3	29.54	6
Japan	0.96	7	0	6	23.98	0
Brazil	0.77	8	0	-3	31.17	19
Turkey	0.75	9	0	2	43.15	25
Mexico	0.68	10	0	0	36.69	20
Saudi Arabia	0.60	11	1	-3	43.87	29
United Kingdom	0.56	12	1	9	24.76	0
France	0.54	13	1	5	24.01	0
Iran	0.54	14	-3	-7	43.12	32
Egypt	0.52	15	0	-3	57.88	29
Pakistan	0.49	16	0	-2	57.38	31
Italy	0.44	17	1	-1	23.60	11
Spain	0.41	18	2	-1	29.42	10
South Korea	0.41	19	0	12	26.80	0
Nigeria	0.40	20	-3	-5	47.18	34
Canada	0.34	21	0	1	26.51	6
Poland	0.34	22	0	4	37.29	21
Thailand	0.33	23	0	-3	33.60	23
Philippines	0.31	24	0	3	44.70	24

Source: MAPFRE Economic Research

Tier 1: A sub-group of Tier 2 with a MAPFRE GIP score that places them in the 95+ percentile
Tier 2: Countries in the ranking with a MAPFRE GIP score that places them in the highest quartile of the list

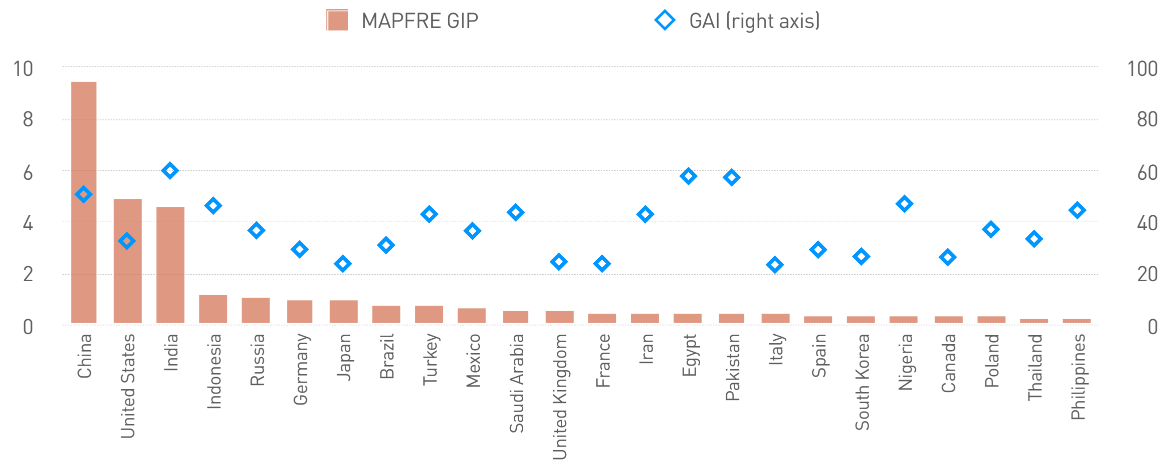
Table 3-b
Life: Concentration in the MAPFRE GIP ranking, 2018

Variable	MAPFRE GIP Life		
	2018	2017	2008
Maximum annual rise	5	15	10
Maximum annual fall	-6	-10	-11
Threshold to Tier 2	0.29	0.27	0.21
Concentration up to Tier 2	85%	85%	82%
Threshold to Tier 1	1.00	0.92	0.90
Concentration up to Tier 1	57%	58%	51%

Source: MAPFRE Economic Research

The Tier 1 and Tier 2 lists, and more specifically the Top 10, are strongly conditioned by their potential contribution to closing the global IPG, as they are weighted by their relative weight in terms of GDP. This makes it difficult to establish which of these markets show broad potential in terms of closing their own gap. Some of these countries have a high local potential (GAI) and are relatively large, although they do not qualify as high as Tier 1 (see Chart 3).

Chart 3
Life: MAPFRE GIP vs. GAI, 2018



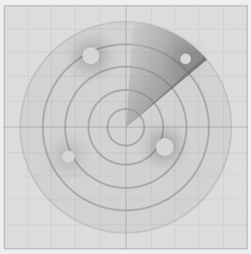
Source: MAPFRE Economic Research

A glance at other promising markets

In addition, we have used the GAI to order the 10 insurance markets with the greatest capacity to close the local insurance gap, filtering only by those in Tier 2. We believe that these countries have extensive capacity to join the Top 10 list in the future, and they should therefore remain on the radar.

The insurance markets on our radar for the Life insurance segment this year are: Egypt, Pakistan, Nigeria and the Philippines (in that order). These four markets are currently at the bottom of the Tier 2 list; however, in the long-term, they could be contenders for the Top 10 positions currently held by emerging markets with a lower GAI in the lower half of the Top 10 list (Mexico, Brazil, Turkey and Russia).

On the radar: Life



★ Egypt
★ Pakistan
★ Nigeria
★ Philippines

Over the next decade, due to their high insurance gap absorption capacity in the Life segment.

Closing the Life insurance gap

Finally, considering the insurance potential calculated using the MAPFRE GIP, the time needed to close the estimated domestic insurance gap for 2018 in the Life segment is an average of 12 years for the developed markets and 23 years for the emerging markets. Table A-3 in the Appendix to this report presents the information for each of the insurance markets analyzed.

4. Results: Non-Life ranking

A glance at the Top 10

On the basis of the information in Table 4-a, the Top 10 insurance markets in the Non-Life ranking in terms of their insurance potential as measured through the MAPFRE GIP Index are the five Tier 1 countries (China, India, the United States, Indonesia, and Japan) and the five countries leading the Tier 2 list (Russia, Germany, Brazil, Turkey, and Mexico).

Tier 1 makes up 58% of the insurance potential in the Non-Life insurance segment, while the next five countries make up approximately 11% of the potential. There appears to be no significant change in this concentration compared to that seen in the previous year[10] (see Table 4-b). The complete list of Non-Life markets considered in the overall analysis is included in Table A-2 in the Appendix to this document.

According to this information, the annual net variation in Tier 1 is one, since only Japan has risen to a higher position compared to the previous year. Russia, however, dropped one place between the two years, so variation in the Top 10 list has remained neutral over the course of 2018. Looking back further in time, Turkey, Indonesia and Mexico have progressed the most in the last decade when it comes to emerging markets, and Japan and Germany when it comes to developed markets. Finally, it is also worth noting that Brazil and Russia have gone down in the ranking during the same period.

As in the Life segment, in the Non-Life segment, the Tier 1 and Tier 2 lists, and more specifically the Top 10, are strongly conditioned by the potential of these markets to contribute to closing the global insurance gap. This makes it difficult to identify which markets show extensive potential in terms of closing their own gap. Some of these countries have high local potential (GAI) and are relatively large, although they do not qualify as high as Tier 1 (see Chart 4).

Source: MAPFRE Economic Research

Table 4-a
Non-Life: MAPFRE GIP ranking (75+ percentile of 96 countries), 2018

Country	MAPFRE GIP	Ranking 2018	Ranking Δ2018–2017	Ranking Δ2018–2008	GAI	Years to close the IPG of 2018
Tier 1						
China	9.20	1	0	0	49.48	19
India	5.11	2	0	0	66.36	24
United States	4.44	3	0	0	29.59	0
Indonesia	1.30	4	0	2	50.69	25
Japan	1.08	5	1	2	26.99	0
Tier 2						
Russia	1.00	6	-1	-2	34.06	17
Germany	0.84	7	0	3	25.32	0
Brazil	0.74	8	0	-3	29.88	9
Turkey	0.65	9	0	5	37.66	19
Mexico	0.64	10	0	2	34.85	15
United Kingdom	0.62	11	0	7	27.42	0
France	0.56	12	0	3	24.83	0
Pakistan	0.52	13	0	0	60.42	27
Egypt	0.52	14	0	-3	57.97	24
Saudi Arabia	0.51	15	1	-6	37.20	23
Italy	0.50	16	-1	0	26.87	1
Nigeria	0.41	17	1	0	48.05	28
South Korea	0.41	18	1	7	26.81	0
Iran	0.41	19	-2	-11	32.79	26
Spain	0.37	20	1	0	26.27	0
Thailand	0.36	21	-1	-2	36.79	16
Philippines	0.33	22	0	1	47.03	19
Canada	0.31	23	1	-1	23.51	0
Bangladesh	0.29	24	-1	7	55.66	21

Source: MAPFRE Economic Research

Tier 1: A sub-group of Tier 2 with a MAPFRE GIP score that places them in the 95+ percentile
Tier 2: Countries in the ranking with a MAPFRE GIP score that places them in the highest quartile of the list

Table 4-b
Non-Life: Concentration in the MAPFRE GIP ranking, 2018

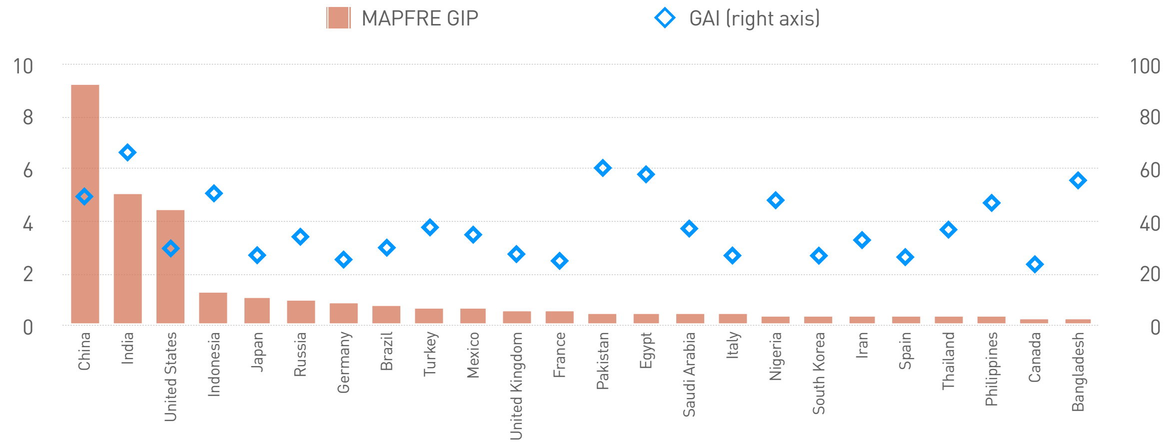
Variable	MAPFRE GIP Non-Life 2018	MAPFRE GIP Non-Life 2017	MAPFRE GIP Non-Life 2008
Maximum annual rise	4	7	6
Maximum annual fall	-4	-8	-9
Threshold to Tier 2	0.28	0.25	0.18
Concentration up to Tier 2	86%	86%	83%
Threshold to Tier 1	1.02	0.88	0.91
Concentration up to Tier 1	58%	59%	54%

Source: MAPFRE Economic Research

A glance at other promising markets

By conducting the same exercise as shown for the Life segment, namely placing the Non-Life markets in order according to the GAI and selecting only those that are in the Top 10 but which are not in Tier 1 or Tier 2, we can identify the markets with a high capacity to close the insurance gap and their relevant size. These promising insurance markets are Pakistan, Egypt, Bangladesh, Nigeria, and the Philippines; countries with huge potential to reduce their domestic insurance gap. Moreover, if they were to grow in size, in the long-term they could rise above other emerging markets,

Chart 4
Non-Life: MAPFRE GIP vs. GAI, 2018



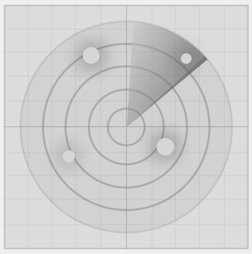
Source: MAPFRE Economic Research

such as Turkey or Mexico, in the insurance potential index.

Closing the Non-Life insurance gap

Finally, this trend is also reflected in the number of years required for these markets to close the domestic IPG determined in 2018 in the Non-Life segment. In this segment, the average time required would be 5 years for the developed markets and 15 years for the emerging markets. Table A-4 in the Appendix to this report presents the information for each of the insurance markets analyzed.

On the radar: Non-Life



- ★ Pakistan
- ★ Egypt
- ★ Bangladesh
- ★ Nigeria
- ★ Philippines

Over the next decade, due to their high insurance gap absorption capacity in the **Non-Life segment**.

5. Summary of conclusions

The following general conclusions can be drawn from the analysis carried out in this report:

- The global Insurance Protection Gap has increased compared to the figures for the previous year. This increase is mainly explained by the still incipient development of the Life segment in the emerging markets, where it continues to show a lower level of relative development than the Non-Life insurance segment.

- Initial conditions and elements of convergence have an unequal effect on the development of insurance potential in the emerging markets, especially in the case of large markets.

- With regard to the MAPFRE GIP, the 10 markets with the greatest insurance potential in the Life and Non-Life segments have hardly changed compared to the estimate made last year and mainly include countries with the largest economies and populations.

- Irrespective of the Top 10 ranking in both segments of the global insurance market, there are markets that show high domestic insurance potential and significant relative weight (predominantly in Asia and Africa).

- Given the current insurance potential and the levels of the existing insurance gap, and considering the variables examined as constants, it is expected that the insurance gap in the Life segment will be closed within 12 years in the developed markets and 23 years in the emerging markets. In the case of the Non-Life segment, the gap should be closed within 5 in the developed markets and 15 years in the emerging markets.

Appendix: Table A-1
Life: MAPFRE GIP global ranking and GAI values, 2018

Country	MAPFRE GIP	Ranking 2018	Ranking Δ2018 –2017	Ranking Δ2018 –2008	GAI
China	9.45	1	0	0	50.83
United States	4.92	2	0	0	32.79
India	4.62	3	0	0	60.02
Indonesia	1.19	4	0	2	46.46
Russia	1.08	5	0	-1	36.88
Germany	0.98	6	0	3	29.54
Japan	0.96	7	0	6	23.98
Brazil	0.77	8	0	-3	31.17
Turkey	0.75	9	0	2	43.15
Mexico	0.68	10	0	0	36.69
Saudi Arabia	0.60	11	1	-3	43.87
United Kingdom	0.56	12	1	9	24.76
France	0.54	13	1	5	24.01
Iran	0.54	14	-3	-7	43.12
Egypt	0.52	15	0	-3	57.88
Pakistan	0.49	16	0	-2	57.38
Italy	0.44	17	1	-1	23.60
Spain	0.41	18	2	-1	29.42
South Korea	0.41	19	0	12	26.80
Nigeria	0.40	20	-3	-5	47.18
Canada	0.34	21	0	1	26.51
Poland	0.34	22	0	4	37.29
Thailand	0.33	23	0	-3	33.60
Philippines	0.31	24	0	3	44.70
Bangladesh	0.28	25	0	11	53.56
Australia	0.26	26	4	3	27.19
Malaysia	0.25	27	2	7	33.92
Algeria	0.24	28	0	-4	50.18
Vietnam	0.24	29	-2	3	45.89
Argentina	0.24	30	-4	-11	35.55
The Netherlands	0.21	31	0	6	29.16
Colombia	0.20	32	0	1	36.64
UAE	0.18	33	0	-5	34.85
Romania	0.15	34	0	1	40.34
Kazakhstan	0.15	35	0	-5	41.13
South Africa	0.15	36	0	5	26.08
Peru	0.13	37	0	3	38.26
Ukraine	0.12	38	0	-13	42.67
Belgium	0.11	39	1	12	26.67
Switzerland	0.11	40	5	12	25.47
Austria	0.11	41	0	7	30.01
Czech Republic	0.11	42	0	0	34.95
Singapore	0.11	43	1	7	25.89
Chile	0.11	44	2	0	30.83
Qatar	0.10	45	-6	-6	39.70
Sri Lanka	0.10	46	-3	0	47.42
Sweden	0.10	47	2	6	24.40
Hong Kong	0.10	48	0	18	27.20
Morocco	0.09	49	-2	0	39.72
Ireland	0.09	50	2	19	29.76
Kuwait	0.09	51	0	-13	38.44
Israel	0.08	52	-2	7	31.06
Hungary	0.08	53	0	2	35.40
Greece	0.07	54	3	-9	29.92
Angola	0.07	55	-1	-12	47.78
Portugal	0.07	56	-1	5	26.62
Oman	0.06	57	-1	-3	43.98
Kenya	0.06	58	0	2	46.86
Norway	0.06	59	2	-12	24.45
Dominican Rep.	0.06	60	0	-2	42.99
Denmark	0.06	61	1	6	23.99
Ecuador	0.06	62	-3	-6	38.59
Tunisia	0.05	63	0	0	45.98
Slovakia	0.05	64	3	1	34.30
Finland	0.05	65	3	3	23.75
New Zealand	0.05	66	-1	5	31.20
Guatemala	0.05	67	-3	-3	43.04
Bulgaria	0.04	68	-2	-11	39.62
Serbia	0.03	69	0	-7	38.25
Panama	0.03	70	0	8	38.92
Jordan	0.03	71	0	-1	44.04
Croatia	0.03	72	0	0	33.52
Lithuania	0.02	73	0	0	35.46
Lebanon	0.02	74	0	5	37.19
Costa Rica	0.02	75	0	-1	35.94
Bahrain	0.02	76	0	1	40.18
Slovenia	0.02	77	1	3	32.02
Uruguay	0.02	78	-1	-3	31.46
Macau	0.02	79	0	3	29.29
El Salvador	0.02	80	1	3	38.47
Luxembourg	0.01	81	1	5	29.95
Latvia	0.01	82	-2	-6	35.16
Zimbabwe	0.01	83	0	2	39.77
Estonia	0.01	84	0	0	35.50
Botswana	0.01	85	0	2	37.56
Trinidad and Tobago	0.01	86	0	-5	30.18
Mauritius	0.01	87	0	3	33.98
Cyprus	0.01	88	0	0	29.91
Jamaica	0.01	89	0	0	33.26
Namibia	0.01	90	1	2	28.63
Iceland	0.01	91	-1	0	36.24
Malta	0.00	92	0	1	34.04
Bahamas	0.00	93	0	1	27.81
Barbados	0.00	94	0	1	24.40
Liechtenstein	0.00	95	0	1	19.74
Venezuela	0.00	96	0	-73	31.49

Source: MAPFRE Economic Research

Appendix: Table A-2
Non-Life: MAPFRE GIP global ranking and GAI values, 2018

Country	MAPFRE GIP	Ranking			GAI
		2018	Δ2018 –2017	Δ2018 –2008	
China	9.20	1	0	0	49.48
India	5.11	2	0	0	66.36
United States	4.44	3	0	0	29.59
Indonesia	1.30	4	0	2	50.69
Japan	1.08	5	1	2	26.99
Russia	1.00	6	-1	-2	34.06
Germany	0.84	7	0	3	25.32
Brazil	0.74	8	0	-3	29.88
Turkey	0.65	9	0	5	37.66
Mexico	0.64	10	0	2	34.85
United Kingdom	0.62	11	0	7	27.42
France	0.56	12	0	3	24.83
Pakistan	0.52	13	0	0	60.42
Egypt	0.52	14	0	-3	57.97
Saudi Arabia	0.51	15	1	-6	37.20
Italy	0.50	16	-1	0	26.87
Nigeria	0.41	17	1	0	48.05
South Korea	0.41	18	1	7	26.81
Iran	0.41	19	-2	-11	32.79
Spain	0.37	20	1	0	26.27
Thailand	0.36	21	-1	-2	36.79
Philippines	0.33	22	0	1	47.03
Canada	0.31	23	1	-1	23.51
Bangladesh	0.29	24	-1	7	55.66
Poland	0.28	25	1	-1	31.34
Malaysia	0.28	26	-1	1	37.77
Vietnam	0.25	27	0	2	47.56
Algeria	0.22	28	0	-2	46.15
Australia	0.22	29	1	-1	23.62
Argentina	0.20	30	-1	-9	29.76
The Netherlands	0.17	31	2	7	24.27
South Africa	0.17	32	2	5	29.91
Colombia	0.17	33	-2	0	31.31
UAE	0.15	34	2	-4	29.11
Kazakhstan	0.15	35	0	-1	39.86
Romania	0.14	36	-4	0	37.77
Singapore	0.13	37	0	5	31.84
Peru	0.13	38	0	2	37.52
Hong Kong	0.12	39	0	12	32.90
Belgium	0.11	40	0	8	25.98
Chile	0.11	41	2	2	30.86
Sweden	0.11	42	-1	8	26.81
Ireland	0.10	43	1	17	34.83
Switzerland	0.10	44	1	8	24.17
Ukraine	0.10	45	1	-10	35.89
Sri Lanka	0.10	46	-4	0	46.81
Czech Republic	0.10	47	0	-3	31.65
Austria	0.09	48	0	5	25.77
Qatar	0.08	49	2	-8	32.82
Morocco	0.08	50	-1	6	35.58
Israel	0.08	51	-1	10	30.06
Kuwait	0.08	52	0	-13	35.33
Hungary	0.07	53	0	2	33.73
Portugal	0.07	54	0	3	27.09
Greece	0.07	55	0	-10	28.82
Norway	0.06	56	4	-7	24.74
Denmark	0.06	57	-1	6	25.31
Kenya	0.06	58	-1	4	44.26
Oman	0.06	59	-1	-5	38.97
Angola	0.05	60	-1	-13	36.74
Dominican Rep.	0.05	61	0	3	38.52
Finland	0.05	62	1	-4	27.04
Ecuador	0.05	63	-1	-4	35.69
Slovakia	0.04	64	1	1	31.78
Guatemala	0.04	65	-1	2	40.57
Tunisia	0.04	66	0	3	37.22
New Zealand	0.04	67	0	6	25.67
Bulgaria	0.04	68	0	-2	32.31
Serbia	0.03	69	0	-1	33.60
Panama	0.03	70	0	9	34.61
Jordan	0.03	71	0	1	37.67
Lithuania	0.02	72	0	-2	34.37
Croatia	0.02	73	0	-2	29.70
Lebanon	0.02	74	0	7	33.39
Costa Rica	0.02	75	0	3	31.52
Bahrain	0.02	76	1	0	35.93
Macau	0.02	77	-1	-2	33.85
Uruguay	0.02	78	0	-4	29.52
Luxembourg	0.01	79	0	4	29.95
Slovenia	0.01	80	0	2	25.23
El Salvador	0.01	81	0	5	34.07
Zimbabwe	0.01	82	1	3	40.25
Botswana	0.01	83	1	4	40.84
Latvia	0.01	84	-2	-7	30.98
Estonia	0.01	85	0	-1	30.83
Trinidad and Tobago	0.01	86	0	-6	26.18
Mauritius	0.01	87	0	2	32.45
Namibia	0.01	88	0	2	32.96
Cyprus	0.01	89	0	-1	27.07
Jamaica	0.01	90	1	1	27.44
Malta	0.01	91	-1	2	36.00
Iceland	0.00	92	0	0	32.97
Bahamas	0.00	93	0	1	23.05
Barbados	0.00	94	0	1	20.70
Liechtenstein	0.00	95	0	1	29.45
Venezuela	0.00	96	0	-64	19.39

Source: MAPFRE Economic Research

Appendix: Table A-3
Life: Years to close the domestic IPG, 2018

Country	Years	Country	Years
China	24	Morocco	22
United States	0	Ireland	0
India	26	Kuwait	27
Indonesia	29	Israel	8
Russia	21	Hungary	21
Germany	6	Greece	16
Japan	0	Angola	29
Brazil	19	Portugal	12
Turkey	25	Oman	29
Mexico	20	Kenya	27
Saudi Arabia	29	Norway	6
United Kingdom	0	Dominican Rep.	23
France	0	Denmark	0
Iran	32	Ecuador	23
Egypt	29	Tunisia	23
Pakistan	31	Slovakia	20
Italy	11	Finland	0
Spain	10	New Zealand	11
South Korea	0	Guatemala	24
Nigeria	34	Bulgaria	29
Canada	6	Serbia	17
Poland	21	Panama	20
Thailand	23	Jordan	27
Philippines	24	Croatia	20
Bangladesh	25	Lithuania	24
Australia	0	Lebanon	20
Malaysia	19	Costa Rica	22
Algeria	30	Bahrain	26
Vietnam	31	Slovenia	17
Argentina	18	Uruguay	17
The Netherlands	0	Macau	15
Colombia	23	El Salvador	23
UAE	25	Luxembourg	11
Romania	28	Latvia	24
Kazakhstan	30	Zimbabwe	17
South Africa	28	Estonia	22
Peru	22	Botswana	23
Ukraine	27	Trinidad and Tobago	12
Belgium	5	Mauritius	16
Switzerland	0	Cyprus	11
Austria	9	Jamaica	17
Czech Republic	22	Namibia	19
Singapore	2	Iceland	14
Chile	13	Malta	17
Qatar	0	Bahamas	n/a
Sri Lanka	29	Barbados	11
Sweden	1	Liechtenstein	n/a
Hong Kong	7	Venezuela	n/a

Source: MAPFRE Economic Research

Appendix: Table A-4
Non-Life: Years to close the domestic IPG, 2018

Country	Years	Country	Years
China	19	Qatar	0
India	24	Morocco	12
United States	0	Israel	0
Indonesia	25	Kuwait	21
Japan	0	Hungary	12
Russia	17	Portugal	19
Germany	0	Greece	11
Brazil	9	Norway	3
Turkey	19	Denmark	0
Mexico	15	Kenya	16
United Kingdom	0	Oman	24
France	0	Angola	26
Pakistan	27	Dominican Rep.	15
Egypt	24	Finland	1
Saudi Arabia	23	Ecuador	18
Italy	1	Slovakia	10
Nigeria	28	Guatemala	19
South Korea	0	Tunisia	14
Iran	26	New Zealand	0
Spain	0	Bulgaria	22
Thailand	16	Serbia	21
Philippines	19	Panama	5
Canada	0	Jordan	18
Bangladesh	21	Lithuania	19
Poland	11	Croatia	6
Malaysia	10	Lebanon	6
Vietnam	26	Costa Rica	11
Algeria	24	Bahrain	17
Australia	0	Macau	15
Argentina	11	Uruguay	8
The Netherlands	0	Luxembourg	19
South Africa	19	Slovenia	0
Colombia	14	El Salvador	17
UAE	19	Zimbabwe	14
Kazakhstan	26	Botswana	17
Romania	22	Latvia	16
Singapore	10	Estonia	13
Peru	16	Trinidad and Tobago	10
Hong Kong	6	Mauritius	8
Belgium	0	Namibia	11
Chile	11	Cyprus	5
Sweden	1	Jamaica	5
Ireland	0	Malta	2
Switzerland	0	Iceland	n/a
Ukraine	22	Bahamas	n/a
Sri Lanka	24	Barbados	n/a
Czech Republic	12	Liechtenstein	n/a
Austria	0	Venezuela	n/a

Source: MAPFRE Economic Research

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References

1/ Appropriate development of the insurance industry contributes to the stabilization of private-sector balance sheets throughout the cycle, promotes long-term savings and investment and increased productivity, and helps to free up resources to allocate them to production activities.

2/ Please see the various reports produced by MAPFRE Economic Research, available on the corporate website of the MAPFRE Group. (www.mapfre.com).

3/ See the reports: MAPFRE Economic Research (2018), *Global Insurance Potential Index*, Madrid, Fundación MAPFRE, and MAPFRE Economic Research (2019), *MAPFRE GIP 2018*, Madrid, Fundación MAPFRE.

4/ For the purposes of this study, the benchmark is represented by the values of the country in the 90th percentile of the distribution of penetration for Life and Non-Life premiums; in this case, the Dutch insurance market.

5/ As can be seen, the first five factors are initial conditions, of which the first and fifth refer to initial absolute size. The second, third and fourth factors relate to the comparison with the ideal level of insurance represented here by the benchmark, thus offering an insight into the margin of convergence toward its values in each market analyzed. Furthermore, six of the variables are dynamic and express the ability to converge (in terms of income and, implicitly, insurance demand) toward the benchmark over time. All these variables have a positive effect on potential except for the second and fourth factors. See: MAPFRE Economic Research (2018), *Global Insurance Potential Index*, Madrid, Fundación MAPFRE, pp. 15–17.

6/ The Gap Absorption Index (GAI) provides a scoring system and a ranking based on each market's potential for closing its insurance gap, which can indicate the rhythm at which the market can converge with the levels of penetration and density of the benchmark selected. It is the result of the weighted sum of each variable used and is therefore very sensitive to the underlying macroeconomic and sectoral conditions and may vary from one year to the next. This indicator provides information about each country's insurance potential with respect to its own market and not as a proportion of global potential. Meanwhile, the MAPFRE GIP (Global Insurance Potential Index) provides a scoring system and ranking that aim to put each market in order according to its potential contribution to closing the global insurance gap (measured in basis points of the global GDP or as a percentage of the total insurance market), thus making it a way of measuring the "size of the market." The MAPFRE GIP is calculated by scaling the GAI score by the relative size of each market. Thus, the local insurance potential obtained by the GAI, weighted by the size of each market on the global market, provides a measure of each market's contribution to the global insurance potential.

7/ It is worth noting that the 2017 IPG calculation produced in 2019 differs from the calculation in our previous report in 2018. This is due to the premium figures being updated by both supervisors and the private sector. As such, where we previously registered an IPG in the Life segment of 442 bps of global GDP, this is now 448 bps. In the Non-Life segment, where we previously registered an IPG of 209 bps of global GDP, this is now an IPG of 219 bps. Although these are minor changes, they have an impact on calculating the potential of certain countries and, therefore, result in minor changes in their global ranking.

8/ BRICS: Brazil, Russia, India, China, and South Africa.

9/ When calculating regional averages, data from some countries has been excluded because it distorted the sample, either due to the country's size or particular situation: San Marino, Liechtenstein, Barbados, Bahrain, and Qatar. The revision of premium volumes in the different markets analyzed produces slight changes in the MAPFRE GIP scoring and, therefore, in the representation of the potential and ranking of each country, as well as in the respective year-on-year variations.

10/ This differs from the calculations in our previous report using data from 2017, where the contribution of the first five countries in the Top 10 list was higher (28%). Since the concentration of potential in Tier 2 countries is very similar to the previous figure (86% vs. 87%), the current data would suggest that the potential is more evenly distributed across the Tier 2 list than was estimated in the previous year. These differences are deduced solely from the changes in the reported premiums used to calculate the GAI and, therefore, the MAPFRE GIP.

Other reports from MAPFRE Economic Research

MAPFRE Economic Research (2019), *The Latin American insurance market in 2018*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2019), *The Spanish insurance market in 2018*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2019), *Economic and Industry Outlook 2019: third quarter perspectives*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2019), *Ranking of insurance groups in Latin America 2018*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2019), *Ranking of the largest European insurance groups 2018*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2019), *Economic and Industry Outlook 2019: second quarter perspectives*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2019), *Population aging*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2019), *MAPFRE GIP 2018*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2018), *Global Insurance Potential Index, Madrid*, Fundación MAPFRE.

MAPFRE Economic Research (2018), *Health systems: a global analysis*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2018), *Insurance industry investments*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2018), *The Latin American insurance market in 2017*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2018), *The Spanish insurance market in 2017*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2018), *Insurance solvency regulation systems*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2017), *Pension systems*, Madrid, Fundación MAPFRE.

MAPFRE Economic Research (2017), *Elements for insurance expansion in Latin America*, Madrid, Fundación MAPFRE.

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MAPFRE GIP 2019

On the basis of an analysis of the economic and demographic factors that determine the growth of the Insurance Protection Gap, and the measurement of the capacity to close said insurance gap in each market, the MAPFRE GIP Index (Global Insurance Potential Index) provides a scoring system and ranking that places insurance markets in order according to their potential contribution to closing the global insurance gap.

This report, prepared by MAPFRE Economic Research, updates the MAPFRE GIP calculation for 96 insurance markets, providing a comparative view of the global potential for the expansion of the insurance industry in the coming years.

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