

MAPFRE GIP 2021

Fundación **MAPFRE**

MAPFRE GIP 2021:
GLOBAL INSURANCE
POTENTIAL INDEX

MAPFRE Σeconomics



MAPFRE GIP 2021

**Global Insurance
Potential Index**

This study has been produced by MAPFRE Economics.
Publication rights have been assigned to Fundación MAPFRE.

The information contained in this study may be reproduced in part, provided the source is cited.

Cite as follows:

MAPFRE Economics (2021), *GIP-MAPFRE 2021 (2021 MAPFRE GIP)*, Madrid, Fundación MAPFRE.

© Cover image: iStock

© Text:

MAPFRE Economics - mapfre.economics@mapfre.com

Spain: Carretera de Pozuelo, 52 - Edificio 1
28222 Majadahonda, Madrid

Mexico: Avenida Revolución, 507
Col. San Pedro de los Pinos
03800 Benito Juárez, Ciudad de México

© For this edition:

2021, Fundación MAPFRE
Paseo de Recoletos, 23. 28004 Madrid
www.fundacionmapfre.org

October 2021

MAPFRE Economics

Manuel Aguilera Verduzco

General Manager

avmanue@mapfre.com

Gonzalo de Cadenas Santiago

Director of Macroeconomics and Financial Analysis

gcaden1@mapfre.com

Ricardo González García

Director of Analysis, Sectorial Research and Regulation

ggricar@mapfre.com

José Brito Correia

jbrito@mapfre.com

Begoña González García

bgonza2@mapfre.com

Isabel Carrasco Carrascal

icarra@mapfre.com

Fernando Mateo Calle

macafee@mapfre.com

Rafael Izquierdo Carrasco

rafaizq@mapfre.com

Eduardo García Castro

gcedua1@mapfre.com

Johannes Ricardo Rojas Díaz

jrroja1@mapfre.com

Vicente Balmaseda del Campo

Álvaro Guillén Marín

David Esteban Montes Rojas

Gadea Ibáñez Franco

Marta Seijas Cabezón

Contents

Introduction	9
1. The MAPFRE GIP: General aspects	11
1.1 The insurance gap and insurance potential.....	11
1.2 Components of the MAPFRE GIP	12
a) The benchmark	12
b) The Insurance Protection Gap	13
c) Relative penetration	17
d) Elasticity of insurance demand in terms of the economic cycle.....	18
e) Relative GDP per capita	18
f) Population size	18
g) The population growth gap	18
h) The GDP growth gap	19
1.3 Scores, rankings, and levels	19
2. Results: ranking for the Life segment	21
2.1 A look at the Top 10	21
2.2 Other promising markets	24
2.3 Number of years needed to close the IPG in the Life segment.....	24
2.4 Overview of insurance potential and its components in the Life segment: 2017-2020.....	24

3. Results: ranking for the Non-Life segment	29
3.1 A look at the Top 10	29
3.2 Other promising markets	31
3.3 Number of years needed to close the IPG in the Non-Life segment	31
3.4 Overview of insurance potential and its components in the Non-Life segment: 2017-2020.....	32
4. Summary of conclusions	37
Methodological considerations for the MAPFRE GIP	39
Appendix	
Worldwide ranking for the MAPFRE GIP with GAI values	41
Number of years needed to close the 2020 domestic IPG	43
Index of tables and charts	45
References	47

Introduction

This report, *MAPFRE GIP 2021: Global Insurance Potential Index*, presents an updated analysis of the factors that have an impact on insurance potential in 96 countries, including those considered as having developed and emerging markets. This analysis has been performed using the most recent data available corresponding to the year 2020. This publication therefore provides further continuity for the similar MAPFRE Economics reports produced for previous years, which have been used to study the evolution of economic and demographic factors that influence increases or decreases in the Insurance Protection Gap. It also presents an updated assessment of each market's capacity to eliminate its insurance gap (based on its speed of convergence towards the penetration and density levels seen in the developed markets). As a new feature in this year's report, there is an analysis of how the method of calculating insurance potential has evolved since this series of reports began four years ago with data from 2017, along with tracking over that same period of the contribution the seven explanatory components have made to the results of those calculations.

Because changes to the Insurance Protection Gap, which are influenced by a variety of economic and demographic factors, are used to measure insurance potential, the MAPFRE GIP takes each country's initial situation as its starting point in order to generate its insurance gap. This is followed by calculation of each country's capacity to close that gap in the future. In this way, the MAPFRE GIP offers a worldwide comparative view of how the insurance industry is developing over time, while also allowing the various markets to be ranked in terms of their potential contribution to eliminating the global insurance gap.

We hope that this new version of the MAPFRE GIP report will contribute to a better understanding of the factors that influence the dynamics of the global expansion of insurance activities, as a way to help support worldwide development of the insurance industry.

MAPFRE Economics

1. The MAPFRE GIP: General aspects

In addition to the value it contributes to society by offering protection for individuals and families, insurance plays a specific economic role in each country, including those with developed markets and those where markets are still considered to be emerging. This involves a sort of two-way relationship, where on the one hand, the existence of insurance encourages economic development, by covering the risks to which companies are exposed as their operations become more complex, while on the other hand, economic development increases a society's general demand for insurance products. Also, from the perspective of operation of the financial system, insurance represents an ongoing channeling of savings that support the processes of medium-term and long-term investment. This is an element that helps provide economic and financial stability, giving support to the economy by helping to mitigate the effects of low points in the pertinent economic cycles.

The 96 countries analyzed by MAPFRE when creating its Global Insurance Potential Index (the MAPFRE GIP) present differences and inequalities in terms of those interactions between economics and the insurance industry. For this reason, the MAPFRE GIP is designed as a measurement that will allow a standardized comparison, which takes into consideration the unique economic structures and levels of insurance development existing in each country. The methodology used to construct the MAPFRE GIP index is explained with the highest level of detail in the initial report from this series¹, and a summary of that methodology is presented in this section.

1.1 The insurance gap and insurance potential

In general terms, the Insurance Protection Gap (IPG) represents the difference between the potential insurance coverage considered as

economically necessary and beneficial for a society, and the amount of coverage actually acquired. This gap is a quantification of the deficit that exists between a state of fully developed insurance levels and the *de facto* levels that exist in a particular country.

This IPG can be estimated using two approaches. The first is an *ex-post* approach based on losses observed. In this case, the IPG is measured as the difference between the financial losses recorded during a specific period and the portion of those losses that were covered by insurance compensation. The second is an *ex-ante* approach, where the IPG is estimated as the difference between certain optimal protection levels, which are those considered as socially and financially adequate for covering the existing risks, and the actual level of protection contracted.

For the year discussed in this report, and in keeping with the methodology followed in other reports issued by MAPFRE Economics², the latter approach to estimation has been applied, with the IPG calculated as a differential based on penetration (premiums/GDP), between each market being analyzed and a theoretical benchmark that represents an approximation of the potential insurance coverage. Therefore, a country will have no Insurance Protection Gap when that differential is found to be zero, or in other words, when the actual insurance market reaches the level of the potential market pursued.

Based on the above, there is a negative correlation between the insurance gap and growth of the insurance markets. This is firstly because, from a quantitative perspective, the IPG decreases as a market's actual penetration index increases. And secondly, from a qualitative perspective, the IPG tends to decrease as the markets become more sophisticated and mature. Accordingly, factors such as sustained economic growth, increased personal

disposable income, general development of the financial system, an efficient regulatory framework, and application of public policies aimed at increasing financial education and inclusion are all elements that contribute to a lower IPG. It is therefore important to emphasize that the IPG is not a static concept. Instead, it changes as a country's economy grows, and also as new risks emerge in conjunction with ongoing economic and social development³.

1.2 Components of the MAPFRE GIP

To calculate the 2021 MAPFRE GIP for the 96 countries included in the analysis, data from the close of 2020 have been used for the 7 variables included as components of that index: (i) the existing IPG in each country; (ii) relative penetration (insurance premiums/GDP); (iii) elasticity of insurance demand in terms of the economic cycle; (iv) relative GDP per capita; (v) population level; (vi) the population growth gap; and (vii) the GDP growth gap⁴.

As explained in the section of this report's Appendix containing further methodological details on calculation of the MAPFRE GIP, the

values of the variables listed, and changes to them, will determine how insurance potential evolves over time. That potential is reflected in the values of the Gap Absorption Index (GAI) and MAPFRE Global Insurance Potential Index (GIP)⁵, and the values of those indexes can change depending on the situation affecting those variables at the time when the analysis is performed.

It should also be pointed out that the components of the MAPFRE GIP can have absolute values used as *initial conditions* (for example, population level), and relative values can also be used for changes seen in certain explanatory variables, in the form of differentials with respect to a theoretical benchmark. Finally, it must be remembered that these factors can have positive or negative effects on the insurance gap, which is updated using the penetration index data for a sample of 96 insurance markets, with approximately two-thirds of those countries having emerging markets and one-third having developed markets.

a) The benchmark

The benchmark is used as a reference point for the analysis. It allows the different variables from each country to be evaluated and compared with respect to a common parameter. The benchmark is highly relevant because of its use as a proxy when calculating the IPG, because an *ex-ante* focus is used to estimate the optimal protection level for each insurance market, with the IPG then determined based on the difference between the optimal and actual levels. The benchmark is also used to apply weighting to other variables that have a direct or indirect impact on calculation of the MAPFRE GIP, such as per capita income and population.

For purposes of the analysis presented in this report, the benchmark⁶ is represented statistically by the values recorded for the insurance market positioned at the 90th percentile of the penetration distribution for the sample of 96 countries, and this is done for the market as a whole as well as for the Life and Non-Life segments. The benchmark is associated with the values recorded for the countries that are closest to its position. It is therefore based on statistical criteria, and the

MAPFRE GIP

The MAPFRE GIP (Global Insurance Potential Index) is a scoring system designed to rank each market based on its contribution to closing the global insurance gap (measured in basis points of global GDP or as a percentage of the total market), which makes it a measurement comparable to the concept of "market size".

GAI

The Gap Absorption Index (GAI) is an intermediate measurement, which produces a point score and relative position (ranking) derived from each market's capacity for closing the insurance gap, until achieving the penetration and density levels selected as the benchmark. This measurement can be seen as similar to a "speed of convergence".

countries used as a reference are not intended to be presented as examples to be followed, whether in terms of the structure of those markets or other specific characteristics.

b) The Insurance Protection Gap

Using data from 2020, the global IPG for the market as a whole (Life and Non-Life segments) was found to be \$5.68 trillion (U.S. dollars), or 670 basis points (bps), of global GDP (see Charts 1.2-a and 1.2-b). This IPG can be broken down into 68.1% in the Life segment (\$3.87 trillion) and 31.9% in the Non-Life segment (\$1.810 trillion), which in terms of global GDP, represent 456 and 213 bps, respectively⁷. Compared to the situation existing in 1990, this breakdown of the IPG's composition has changed significantly. Specifically, the Life segment has gained 10.4 percentage points (pp) between 1990 and 2020 in terms of its contribution to the total insurance gap (see Chart 1.2-c).

Overall, the IPG decreased by -2.4% between 2019 and 2020, as seen in Chart 1.2-d. This decrease with respect to 2019 in absolute terms has been fundamentally due to the indirect negative impact of the COVID-19 pandemic on worldwide GDP, plus the direct effect on the penetration index derived from an increase in insurance premiums with respect to an optimal level of potential growth. In addition, when evolution of the IPG is broken down by segments, it can be seen that the decrease in the Non-Life segment (-3.9%) is much greater than the decrease seen in the Life segment (-1.7%). This is generally due to the fact that the pandemic had a stronger negative impact on the former segment than on the latter. However, when evolution of the IPG is analyzed in relation to the GDP, it can be seen that the IPG increased by 6.3 bps of the global GDP. This is essentially the result of the performance seen in the Life segment (with an increase of 7.6 bps), where premiums decreased more sharply than the global GDP, because the IPG for the Non-Life segment actually decreased (-1.3 bps), as a result of a slight rise in premiums in a context of

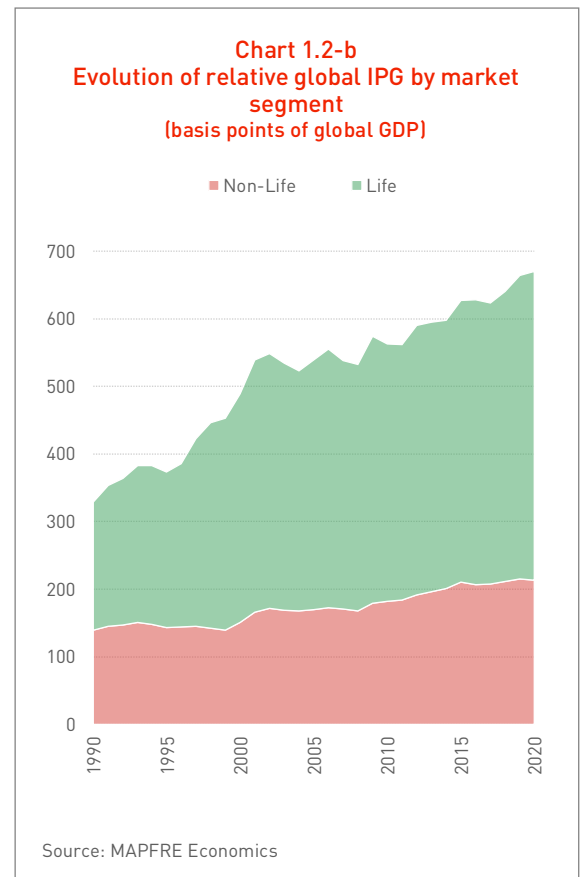
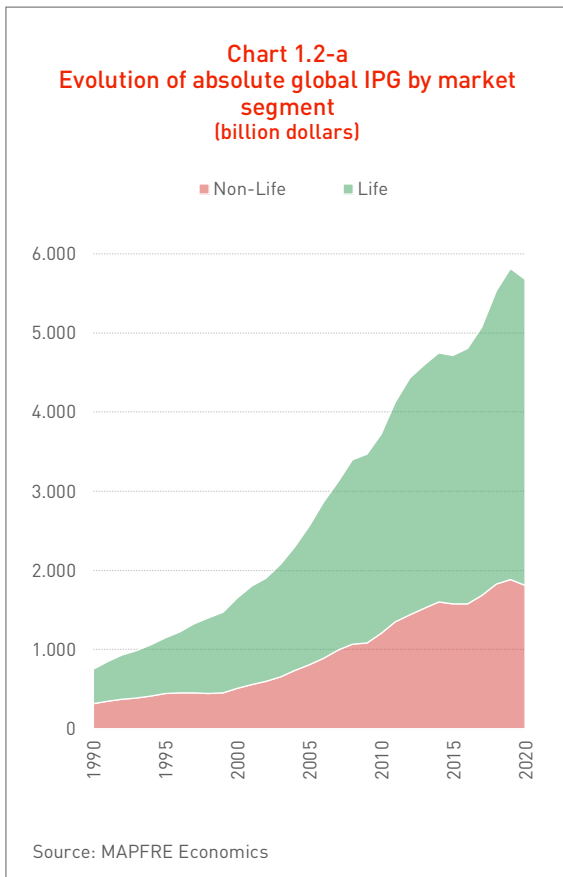
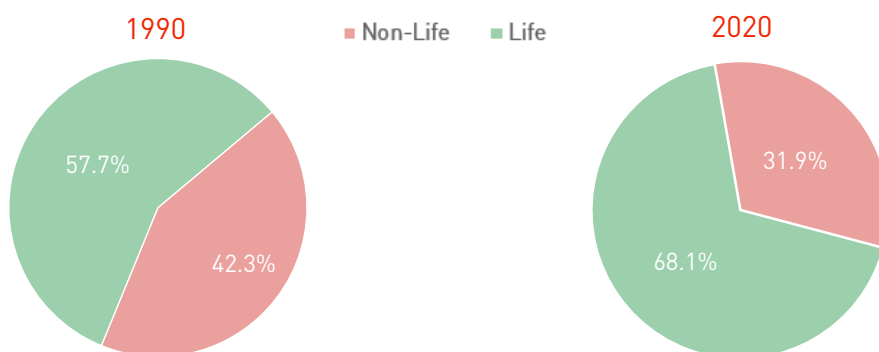


Chart 1.2-c
Structure of global IPG by market segment, 1990-2020 (%)



Source: MAPFRE Economics

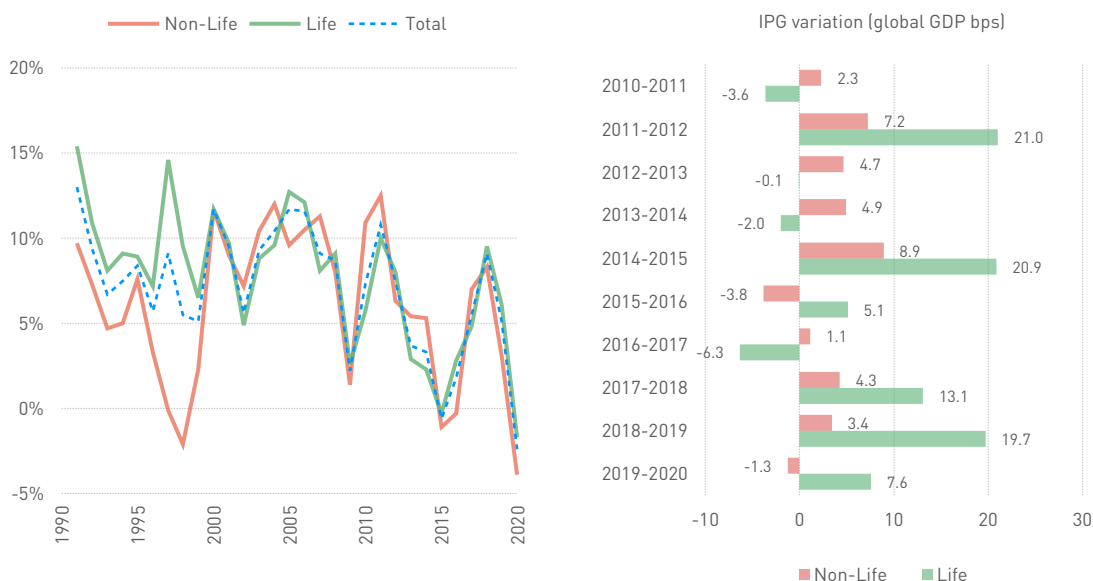
contracting GDP resulting from the pandemic (see Chart 1.2-d).

Specifically, in the Non-Life segment the decrease seen in global GDP during 2020 (-3.3%) did not exceed the sharper decrease seen in the IPG (-3.9%), which was caused by increasing premiums (2.8%) with respect to the previous year. Therefore, the overall contribution of the IPG with respect to the GDP decreased [-1.3 bps] compared to the previous year. In the Life

segment, on the other hand, the decrease in the GDP (-3.3%) did exceed the decrease seen in the IPG (-1.7%), as caused by a decrease in premiums (-3.1%), in turn causing the contribution of IPG/GDP to increase by 7.6 bps with respect to 2019 (see Table 1).

When the performance of the IPG is analyzed based on the various economic groupings of countries, two facts that had been revealed in previous reports are confirmed. First, most of

Chart 1.2-d
Growth of global IPG by market segment (annual growth rate %; variation basis points of global GDP)



Source: MAPFRE Economics

Table 1
Variation in main variables for the MAPFRE GIP, by economic grouping and insurance segment

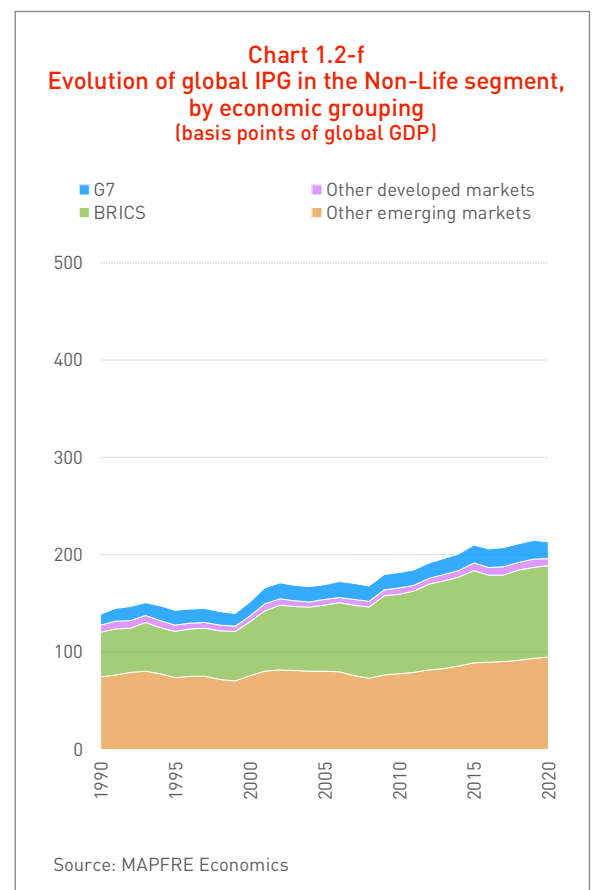
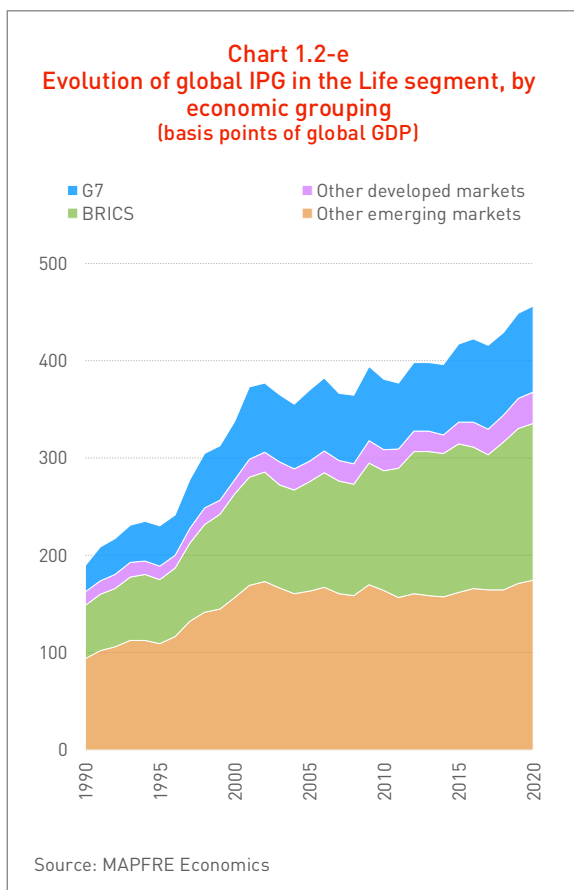
Economic grouping / Insurance segment	Change in premiums 2020-2019 (%)	Change in GDP 2020-2019 (%)	Change in total IPG (%)	Change in IPG/GDP (bps)	Change in relative penetration index [%]**
Life					
G7	-4.7%	-2.5%	-2.4%	0.8	13.9%
Other developed	-5.6%	-2.7%	2.1%	1.7	-9.7%
BRICS	0.9%	-2.3%	-2.5%	1.3	1.5%
Other emerging	2.0%	-5.9%	-1.2%	3.7	1.1%
Non-Life					
G7	2.8%	-2.5%	-12.4%	-1.8	2.0%
Other developed	3.5%	-2.7%	-18.2%	-1.3	2.5%
BRICS	2.9%	-2.3%	-2.6%	0.6	1.1%
Other emerging	1.6%	-5.9%	-2.0%	1.2	1.6%

Source: MAPFRE Economics

* Change in nominal GDP for each economic grouping (in dollars).
** Only considers relative penetration values under 100%.

the worldwide insurance gap is derived from emerging markets (78.3%); and, second, the IPG for the Life segment has grown at a faster pace than the IPG for the Non-Life segment.

As such, in 2020 there was 73.5% of the IPG in the Life segment derived from emerging markets (35.3% from the BRICS⁸ countries and 38.3% from other emerging markets). This is a decrease of -4.8 pp compared to 1990, indicating that in this segment, emerging insurance markets made progress in convergence towards

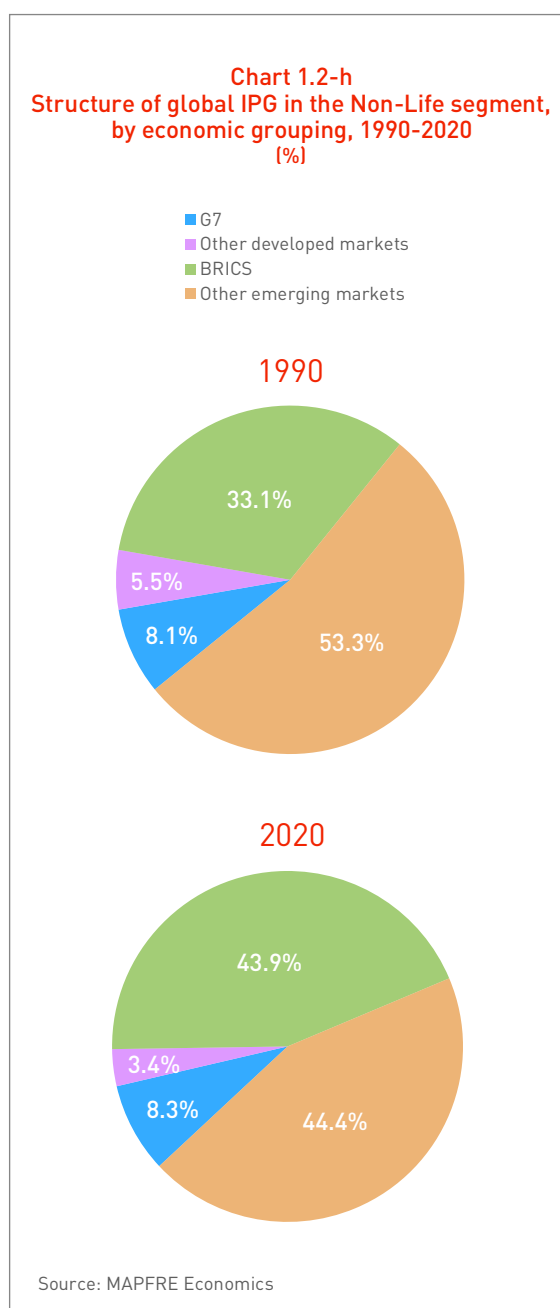
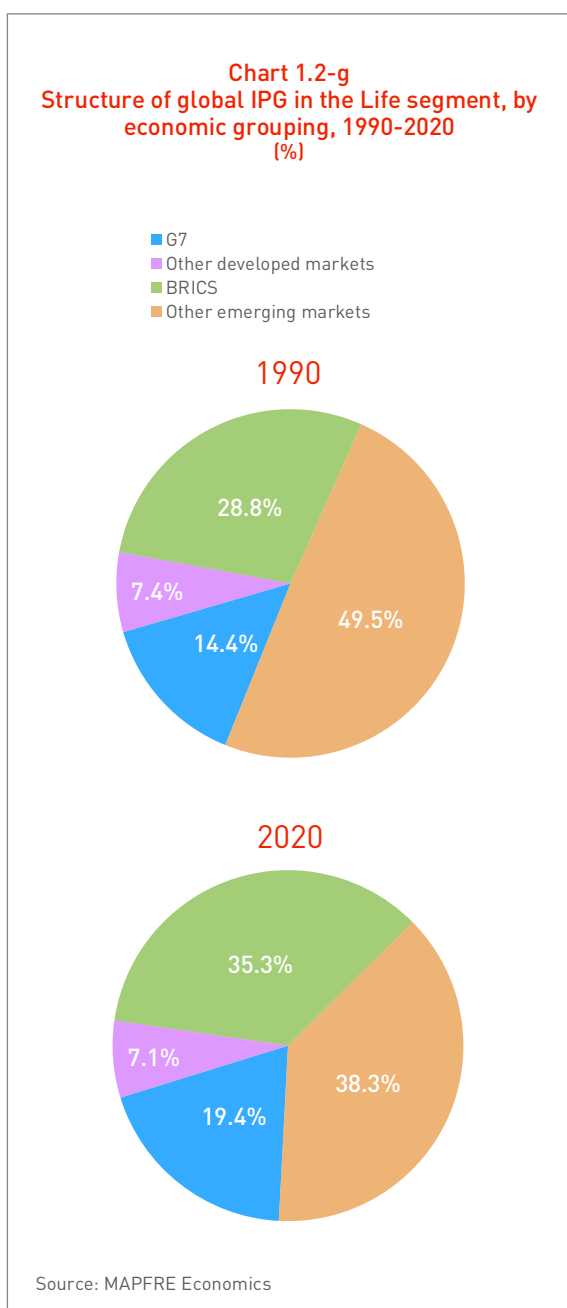


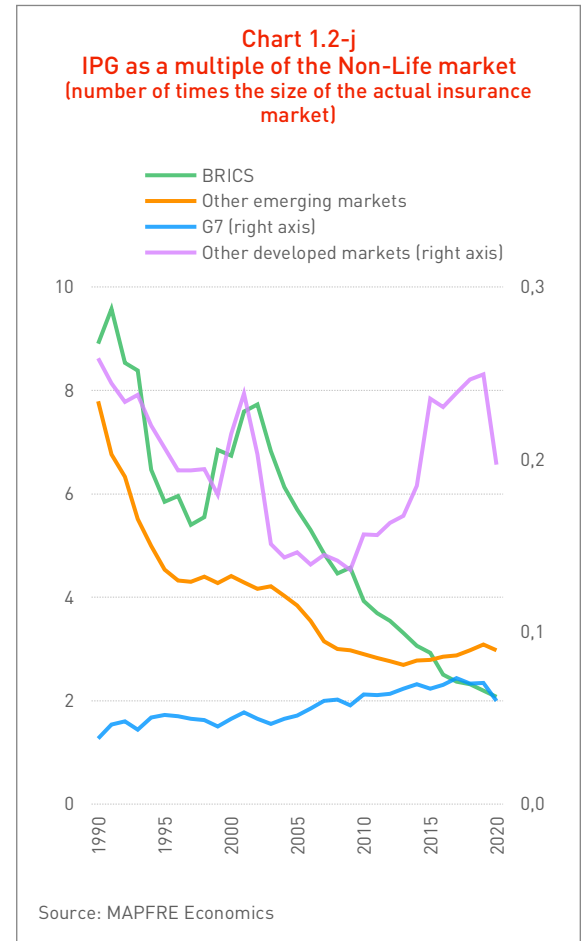
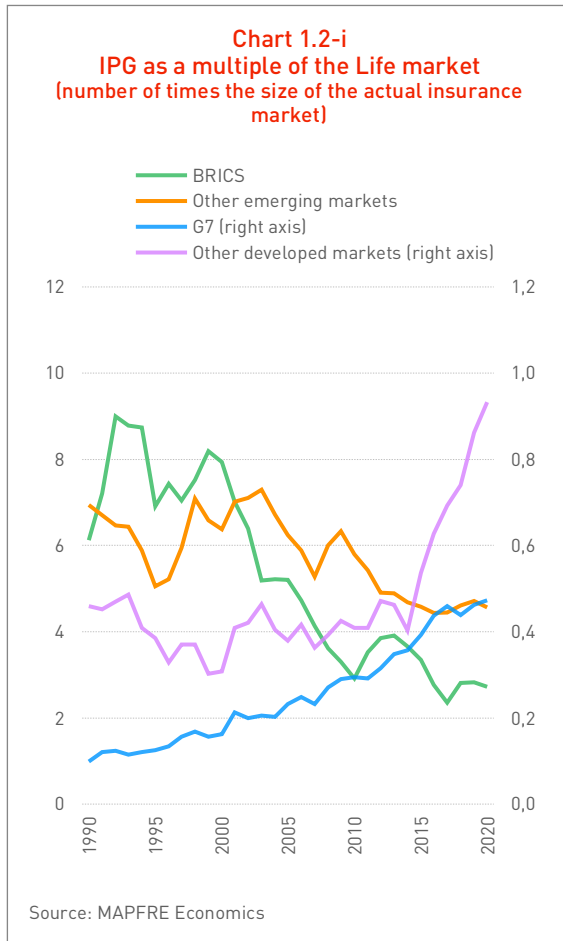
the benchmark. Overall, between 2019 and 2020 the insurance gap in the Life segment decreased by -2.5% in the BRICS countries, and by -1.2% in the rest of the emerging markets, while in the G7⁹ markets, the decrease was -2.4%, but with a 2.1% increase in the other developed markets (see Charts 1.2-e and 1.2-g).

In the Non-Life segment in 2020, 88.4% of the insurance gap was derived from emerging markets (43.9% from the BRICS countries and 44.4% from the rest of the emerging markets), which is 2.0 pp higher than the figure recorded

in 1990. Overall, in the 2019- 2020 period the IPG in the Non-Life segment decreased by -2.6% in the BRICS countries and by -2.0% in the rest of the emerging markets, while a decrease of -12.4% was recorded for that same period for the G7 countries and a decrease of -18.2% for the rest of the developed markets (see Charts 1.2-f and 1.2-h).

When measured in terms of the size of the existing insurance business, it can be seen that in 2020, the IPG in the Life segment was between





2.7 times (BRICS countries) and 4.6 times (other emerging markets) the size of the existing insurance business, while in the non-G7 developed markets, this gap indicator represented 0.9 times the size of the existing insurance business, and 0.5 times in the G7 group of countries. In the Non-Life segment, in 2020 the IPG represented 2.1 times the size of the existing business in the BRICS countries and 3.0 times in the rest of the developing markets, while this multiplier was 0.1 times in the G7 countries and 0.2 pp [sic] in the rest of the developed markets, respectively.

Between 2019 and 2020, when measured as a multiplier of the existing market in the Life segment, the IPG evolved differently. Specifically, that figure decreased in the BRICS countries by -9.6 pp and in the rest of the emerging markets by -14.7 pp, while in the G7 countries it remained steady (about 1.1 pp), while increasing by 7 pp in the rest of the developed markets. In the case of Non-Life, the insurance gap decreased in all markets between 2019 and 2020. That decrease was the sharpest

in the BRICS countries (-11.9 pp), followed by the rest of the emerging markets (-11.1 pp), then by the non-G7 developed markets (-5.2 pp), and finally, the G7 countries, with the lowest decrease of -1.0 pp.

When considering the dynamics since 1990 for the IPG as a multiple of the existing market, it can be seen that in the Life segment, there has been a stronger process of convergence in the BRICS countries and in the rest of the emerging markets, where there are initial IPG values close to 6 times the size of the actual market. In the countries with developed markets, on the other hand, this indicator has increased, after starting in 1990 with initial values of 0.1 times and 0.46 times the size of the insurance business for the G7 countries and the rest of the developed markets, respectively. However, in the Non-Life segment stable values have been maintained since 1990 in the G7 group, at 0.04 times the size of the insurance business, as well as in the rest of the developed countries, at 0.26 times (see Charts 1.2-i and 1.2-j).

c) Relative penetration

Relative penetration measures the penetration levels for the market under analysis with respect to the benchmark. This means that this measurement can have values above 100% if a market's penetration index exceeds the target (benchmark) penetration index, or below 100% if the target penetration index is higher than the index seen in the particular market. When the indexes are analyzed *by economic groupings* (developed and emerging markets)¹⁰ and by segments (Life and Non-Life), it can be seen that in the Non-Life segment, only the insurance markets in the G7 countries have a relative penetration above 100% (112%). The rest of the developed markets are next with 74%, while the figures for the markets in the BRICS countries and the rest of the emerging markets are similar to each other (46% and 47%, respectively). However, it must also be pointed out that all of the markets show relative penetration higher than the levels recorded in 2019, which is due to the double effect discussed above: there has been an increase in premiums in the Non-Life segment and at the same time a decrease in GDP (see Table 1 above). When relative penetration is considered only for the markets that have a non-zero insurance protection gap (IPG), the developed markets show a relative penetration that has increased by 2.5%, the G7 countries show an increase of 2.0%, and the rest of the emerging markets and the BRICS countries have increased by 1.6% and 1.1%, respectively.

However, the evolution of relative penetration is different in the Life segment, where all of the markets analyzed are significantly below the target level for penetration, with the G7 countries at 89%, the BRICS countries at 68%, the rest of the developed markets at 49%, and the rest of the emerging markets at just 26%. For relative penetration compared to the benchmark (and only considering markets with a non-zero insurance protection gap), the variation with respect to the previous year has been different, in accordance with the changes seen in the premiums and GDP and the increase in the IPG. Specifically, in 2020 relative penetration increased by 13.9% in the group of G7 countries, by 1.5% in the BRICS countries, and by 1.1% in the rest of the emerging markets, which has led to a decrease in the IPG compared

to the previous year. However, relative penetration decreased in the rest of the developed markets (-9.7%), where the IPG has increased by 2.1%.

d) Elasticity of insurance demand in terms of the economic cycle

For the purposes of this version of the report, it has been assumed that for the two consecutive years being discussed, there have been no changes in the elasticity of insurance demand in terms of the economic cycle.

e) Relative GDP per capita

In 2020, the global GDP per capita decreased by -4.3% with respect to the previous year, with the most significant drop seen in the BRICS countries (-11.1%) and in the rest of the emerging markets (-6.4%). This decrease has been less pronounced in the G7 countries (-3.6%) and in the rest of the developed markets (-2.4%). In 2020, the average GDP per capita in countries with developed markets represented approximately 117.4% of the benchmark GDP per capita used for all markets, while the average for countries with emerging markets represented only 24.6% of the benchmark. It is worth pointing out that for this metric, the countries with developed markets have increased their relative GDP per capita by 4.5 pp with respect to the previous year, when it represented 112.9% of the benchmark (this is explained by the fact that the decrease seen in the GDP per capita has been less than the decrease in the benchmark), while the relative GDP per capita for the countries with emerging markets has decreased by -0.4 pp (from 24.9% in 2019), because on average the GDP decreased more than the benchmark did.

f) Population size

For purposes of this report, the global population in 2020 (which corresponds to the sample composed of the 96 countries included in this analysis) was 6.514 billion, according to estimates from the United Nations.¹¹ The population of the countries on that list with developed markets has grown by 0.29% since 2019, to reach a total of 951.3 million people (+2.8 million), while the total population of the

countries with emerging markets has grown by 49.6 million (to reach 5.563 billion), representing a 0.90% increase compared to the previous year. It should be mentioned that for the countries included in the sample, the population of countries with developed markets represents 17% of the population of countries with emerging markets, while in 1990 that ratio was 21%. It can also be noted that the average size of a country with an emerging market (79.5 million) represents 217% of the average population of the countries with developed markets (36.6 million).

g) The population growth gap

Fertility and life expectancy do not change from one year to the next, so the gap from population growth is generally assumed to remain constant. Nevertheless, it is worth noting that in 2020, the countries with emerging markets had 0.9% population growth, which is similar to the benchmark figure (0.87%) but much higher than the figure for countries with developed markets (0.29%). However, it is still too soon to assess the impact that the worldwide COVID-19 pandemic may have on population growth.

h) The GDP growth gap

In 2020, the gap between recorded GDP growth and the benchmark value decreased by an average of -0.5% compared to the previous year. When the countries are analyzed by groupings, it can be seen that the BRICS countries show the sharpest decrease in the gap between their GDP and the benchmark, with that gap having a value of 0.6% for 2020, compared to 2.03% in 2019. The countries with emerging markets show a growth gap value close to 0.6%, which is double the figure obtained for the countries with developed markets (0.3% on average). Based upon all of this, it can be expected that the ranking in both the Life and Non-Life segments will be increasingly dominated by countries with emerging insurance markets, especially large markets that are not part of the BRICS grouping, and which have a capacity to converge in terms of income while still maintaining high levels of underinsurance.

1.3 Scores, rankings, and levels

As explained in previous reports, the point scores obtained by calculation of the Gap

Absorption Index (GAI), and their re-dimensioning as part of the overall contribution to the MAPFRE GIP (Global Insurance Potential Index), are used to categorize and rank the countries based on their insurance potential. The order of the ranking is based on the MAPFRE GIP, since that index takes into account the size of the market and therefore its contribution to closing the global insurance gap.

Based on these elements, this report presents the 2021 ranking for the MAPFRE GIP Index, using figures taken from the insurance industry and other economic data from the year 2020. This ranking includes a total of 96 countries with emerging and developed insurance markets, for both the Life and Non-Life segments, ranked according to their potential contribution to eliminating the global insurance gap. In relation to this, it is important to note that when adding information for 2020, some revisions and additions were made to the figures reported in previous years. This is especially the case for data on premiums, and although these revisions do not alter the conclusions presented in earlier publications, recalculation using updated information could cause minor changes to the rankings reported in the previous edition¹².

In view of the aspects discussed above, the MAPFRE GIP ranking identifies two categories or lists of markets with high insurance potential. The first of these, Tier 2, includes insurance markets positioned above the 75th percentile in terms of their insurance potential. When taken as a whole, these countries represent over 80% of the global insurance potential. The second of these categories, Tier 1, is more restrictive. It is a sub-group of Tier 2, and it includes only countries with an insurance potential positioned above the 95th percentile and which, when taken as a whole, account for over 50% of global insurance potential. This means that in order to achieve a high position in the ranking, a market needs to be relevant in terms of its size (measured on the basis of GDP), and it also needs to have adequate capacity to close its own IPG. It also means that there are some countries with ample capacity to close their own insurance gap, but which are still positioned low in the ranking because of their relatively minor economic weight. However, this report also gives some attention to that set of countries, because their convergence towards the benchmarks makes them a future source of insurance potential.

2. Results: Life segment ranking

2.1 A look at the Top 10

Table 2.1-a and Chart 2.1-a show the Top 10 markets for the Life segment, based on their insurance potential measured using the MAPFRE GIP. The top five countries (China, United States, India, Russia, and Japan) are included in Tier 1 of the Life insurance markets. Those countries are followed by Indonesia, Germany, Brazil, Mexico, and Turkey, which are positioned at the top of Tier 2. The top four countries have maintained the same positions as in the previous year, while Japan has moved ahead of Indonesia and Germany into fifth place. Turkey has dropped down two positions, causing Brazil and Mexico to move up.

Although there have not been many changes with respect to 2019 in terms of relative positions¹³, a generalized decrease can be seen in the Life segment in terms of the relative insurance potential of each market when compared to the previous year, with lower GAI and MAPFRE GIP

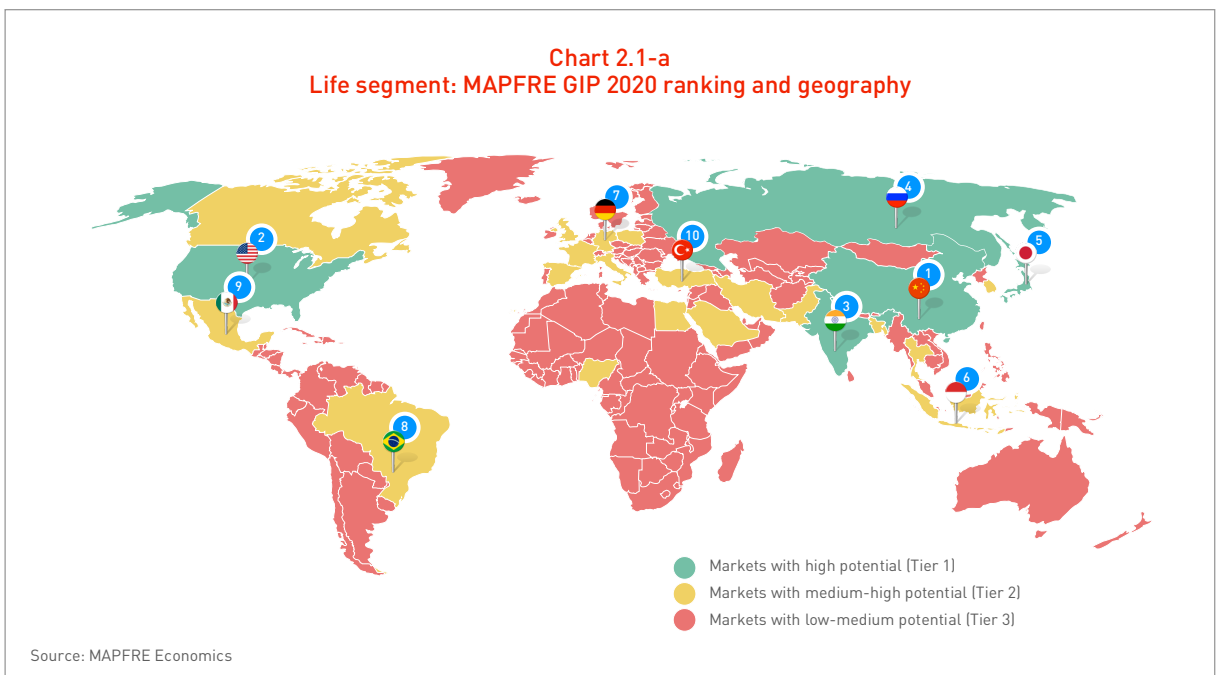


Table 2.1-a
Life segment: MAPFRE GIP ranking (75+ percentile, 96 countries)

Country	MAPFRE GIP	Ranking			GAI	Years to close 2020 IPG
		2020	Δ2020-2019*	Δ2020-2010*		
Tier 1						
China	9.22	1	0	0	50.39	38
United States	5.52	2	0	1	34.96	10
India	3.68	3	0	-1	54.75	6
Russia	1.21	4	0	0	38.96	37
Japan	1.15	5	2	6	28.65	0
Tier 2						
Indonesia	1.13	6	-1	-1	45.52	34
Germany	1.02	7	-1	5	30.16	11
Brazil	0.78	8	1	-2	32.88	22
Mexico	0.67	9	1	4	36.67	23
Turkey	0.67	10	-2	-1	37.49	35
France	0.62	11	0	10	26.40	0
United Kingdom	0.57	12	0	25	24.88	0
Saudi Arabia	0.51	13	0	-6	41.70	32
Egypt	0.47	14	1	-4	48.54	31
Italy	0.46	15	-1	12	24.42	0
South Korea	0.45	16	1	13	26.91	0
Pakistan	0.42	17	1	-3	52.27	38
Spain	0.42	18	-2	1	30.74	8
Canada	0.41	19	1	4	29.65	5
Iran	0.39	20	-1	-12	47.36	4
Poland	0.35	21	0	-3	36.06	31
Thailand	0.34	22	1	-6	35.32	26
Nigeria	0.34	23	-1	-8	41.75	33
Bangladesh	0.32	24	2	10	50.87	25

Source: MAPFRE Economics

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

* Variation in the 2020 ranking compared to previous years may differ from the contents published in previous versions of this report, because of recalculations performed in 2020 using updated information for previous years for some of the variables included in the estimation.

values. As explained in the previous section, this decrease is due to a narrowing of the insurance protection gap (IPG), which is used as the starting point for calculating the GAI and, therefore, the MAPFRE GIP as well. In turn, this narrowing of the IPG in the Life segment has been due to a general decrease in GDP that has had a stronger impact on the penetration index than the decrease in premium volume in that segment. In general, potential growth of the GDP with respect to the benchmark has also decreased. China's

extraordinary performance is also worth emphasizing, where the value for the MAPFRE GIP index has remained practically unchanged, despite the reduction seen in the insurance potential (GAI). This has been due to an increase in premiums that exceeds the increase in nominal GDP, and this explains the increase seen in that country's penetration index in the Life segment.

It is important to point out that the concentration of insurance potential increased during 2020,

Table 2.1-b
Life segment: Concentration in the MAPFRE GIP ranking

Variable	MAPFRE GIP Life		
	2020	2019	2010
Maximum annual rise	10	3	10
Maximum annual fall	-5	-8	-7
Threshold to Tier 2	0.32	0.36	0.22
Concentration in Tiers 1 and 2	84.3%	83.2%	83.6%
Threshold to Tier 1	1.14	1.26	1.17
Concentration in Tier 1	56.3%	53.3%	55.0%

Source: MAPFRE Economics

with 56.3% of that potential now attributable to the Tier 1 markets, compared to 53.3% for the previous year. The insurance potential of the Tier 2 markets is also significant, especially for the countries appearing in the upper portion of that tier, with 12% of the MAPFRE GIP concentrated there. This is also true for 2019, when the data available in 2020 is used for recalculation (see Table 2.1-b). The complete list of GAI and MAPFRE GIP values for markets in the Life segment is found in the Appendix to this report in Table A-1.

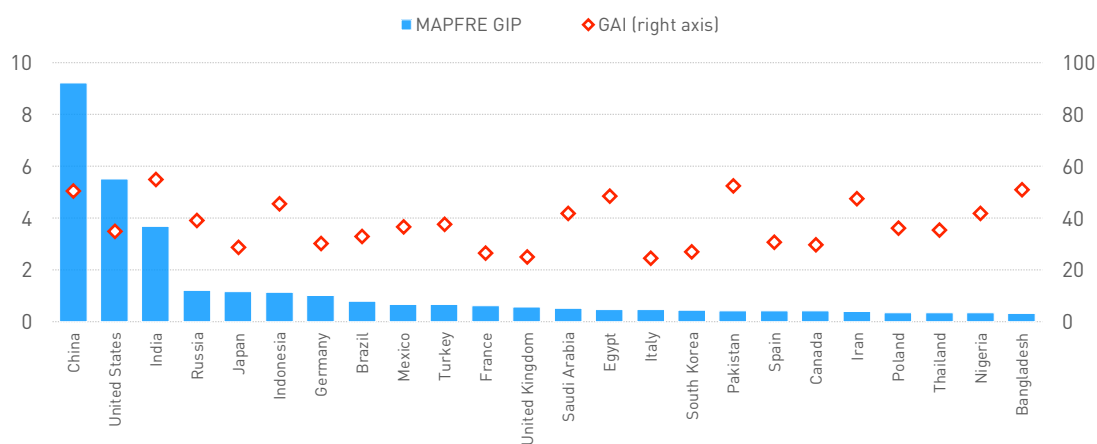
While Japan has now moved ahead of Germany into the 5th position for the Life segment, Turkey has dropped down two positions into 10th, causing Brazil and Mexico to each move up one position. It is notable that Bangladesh, which

occupied the 26th position last year, appears for the first time in Tier 2 of the MAPFRE GIP ranking for the Life segment¹⁴.

When considering the dynamics seen over the last decade for the 16 most important countries in the MAPFRE GIP ranking for the Life segment, the United Kingdom, South Korea, France, and Italy show the most substantial increases. It is also worth pointing out that during the last 10 years, those countries have also experienced notable growth in their potential GDP (the GDP of countries with emerging markets such as South Korea has even grown during 2020, despite the global contraction). However, it has also been seen how the low interest rate environment has slowed their growth in the Life segment (especially for the European markets), which has an impact on the growth of insurance potential.

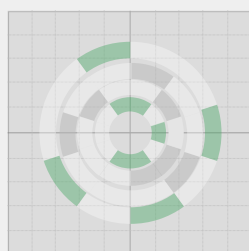
The Tier 1 and Tier 2 lists for the Life segment, and more specifically the Top 10, are strongly conditioned by the potential contribution of these markets to closing the global IPG, since they are weighted by their relative weight in terms of GDP. This can make it difficult to establish which of these markets have considerable potential in terms of closing their own gap. In relation to this, some of those countries show a high local potential (GAI) and have a relatively large size, although not as large as the countries included in Tier 1 (see Chart 2.1-b).

Chart 2.1-b
Life segment: MAPFRE GIP vs. GAI (Tiers 1 and 2)



Source: MAPFRE Economics

Life: On the radar



- Pakistan
- Egypt
- Bangladesh

In the **Life segment**, these three markets could stand out during the next decade because of their ability to absorb the insurance gap.

2.2 Other promising markets

To provide a perspective based on a complementary analysis, the GAI has been used to rank the 10 countries with the greatest capacity to close their local gap, with inclusion of only the countries in Tier 2 (i.e., excluding Tier 1 and Tier 3). These countries should have a strong potential for joining the Top 10 list in the future, and they should therefore be considered as “on the radar”. Specifically, the countries on the radar from the Life segment in 2020 are Pakistan and Egypt (positioned around the middle of the Tier 2 list), as well as Bangladesh (which occupies the last position in Tier 2). In the long-term, the conditions of these insurance markets could allow them to enter into the Top 10 positions currently held by countries with emerging markets and lower GAI values.

2.3 Number of years needed to close the IPG in the Life segment

In the Life segment, the number of years needed to close the domestic insurance gap, based on the insurance potential calculated using the MAPFRE GIP, has increased from an estimate of 6 years in 2019 to 7 years in 2020; and for the countries with emerging markets, that estimate has decreased from 22 years in 2019 to 20 years in 2020. The reason for these changes is that the performance seen in the Life segment in 2020 was closely linked to the evolution of premiums, the nominal GDP, and changes to the IPG in the

geographic areas (this information is found in Table 1).

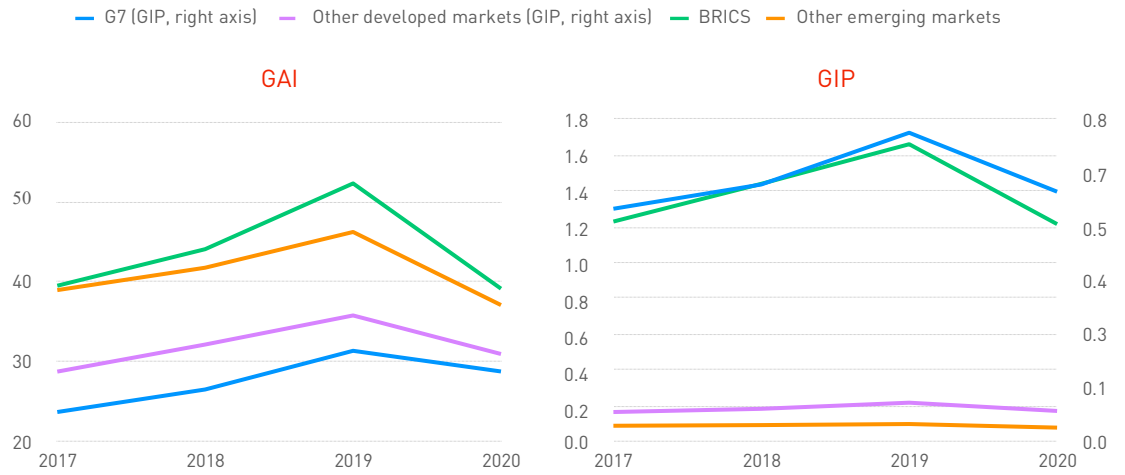
For the countries with emerging markets, the premium volume has grown in the Life segment and the nominal GDP has decreased, and this translates into an increase in the penetration index (a change of +1.5 pp in the relative penetration index for the BRICS countries and +1.1 pp for the rest of the emerging markets). This has resulted in a decrease to the IPG, and fewer years are therefore required in order to close that differential in terms of insurance potential. On the other hand, in the non-G7 countries with developed markets, there has been a decrease in Life insurance premiums and in the nominal GDP, but the IPG has increased (+2.1 pp) because of a decrease in their relative penetration compared to 2019 (-9.7 pp). At the same time, the opposite has occurred for the group of G7 countries (with the IPG decreasing by -2.4 pp and the relative penetration index increasing by 13.9%). As the total net effect for the countries with developed markets, this translates into 7 years (about one additional year compared to the previous year’s figure) needed to close the insurance potential gap. In the Appendix to this report, Table A-3 presents the information relating to the number of years needed to close the IPG, as determined in 2020 for the Life segment for each of the insurance markets analyzed.

2.4 Overview of insurance potential and its components in the Life segment: 2017-2020

Because it has been possible for data covering a period of four years to be compiled since production of the first MAPFRE GIP report¹⁵, in this new edition a deeper retrospective view will be presented regarding evolution of insurance potential, as measured using the MAPFRE GIP and GAI indexes. In relation to this, Charts 2.4-a and 2.4-b illustrate this evolution for the various economic groupings and sets of countries (tiers) included in the ranking for the Life segment.

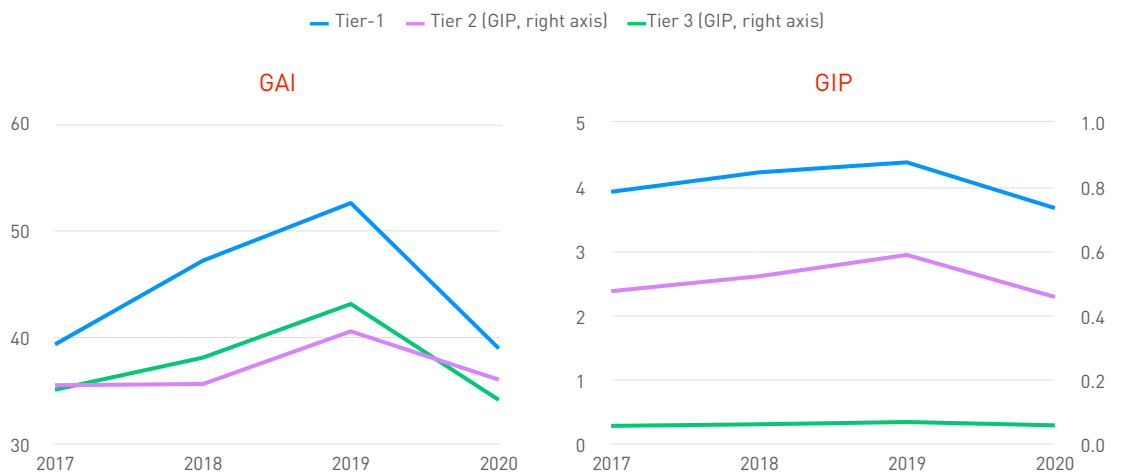
Evolution of the GAI and MAPFRE GIP generally show an upward trend during the period of 2017-2019, with the BRICS countries having the highest values and steepest slope (with a GAI

Chart 2.4 a
Life segment: evolution of the median GAI and GIP, by economic grouping



Fuente: MAPFRE Economics

Chart 2.4 b
Life segment: evolution of the median GAI and GIP, by tier



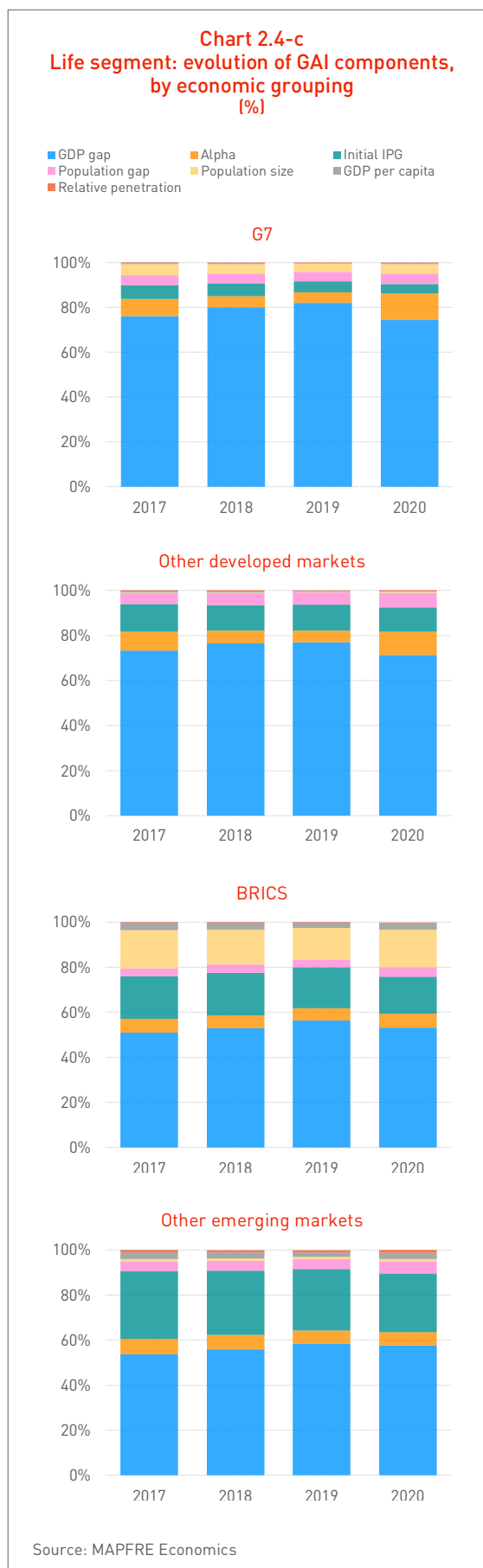
Fuente: MAPFRE Economics

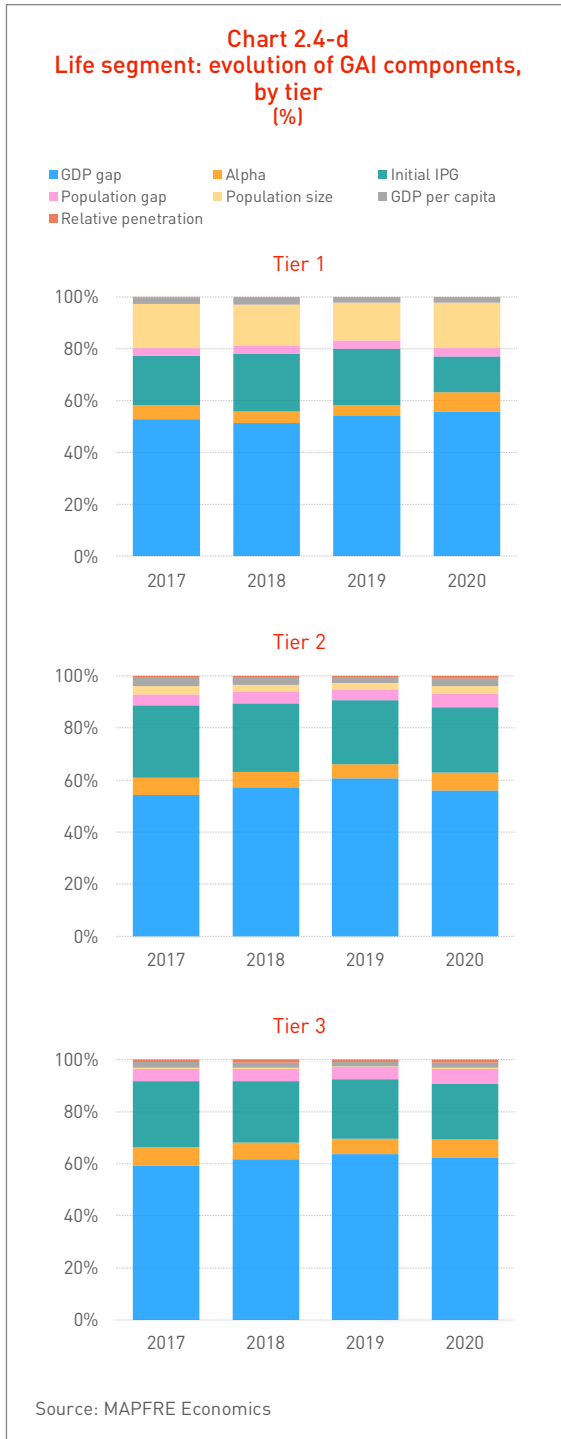
that peaks at 52.04 in 2019), followed by the rest of the countries with emerging markets (with a GAI that peaks at 46.01 in 2019). From the perspective of the tiers into which countries have been grouped in the MAPFRE GIP ranking for the Life segment, and taking into account the fact that more than 60% of Tier 1 consists of BRICS and emerging market countries, it is not surprising that these are the countries (from Tier 1 followed by those from Tier 2) that have demonstrated the best performance during that time period in terms of insurance potential. However, although as explained above the figures for all countries have evolved in an unfavorable manner during this atypical year caused by the COVID-19 crisis, it is specifically the BRICS countries and the rest of the countries with emerging markets that have suffered the most in terms of evolution of their GAI and insurance potential.

A similar interpretation can be taken from the evolution seen for the MAPFRE GIP (Charts v-2 and v-4 [sic]). However, the difference is that because weighting is applied based on each country's GDP, the BRICS countries continue to lead in terms of growth of insurance potential. They are followed in this case by the G7 countries, which take on more relevance because of the specific weight of their own GDP.

Chart 2.4-c presents a more detailed view of the behavior of the GAI and its seven components. Based on that information, it can be seen that the main component for all economic groupings is the GDP growth gap. However, while that factor explains around 70% of the GAI for the G7 countries and the rest of the countries with developed markets, that figure drops to about 50% for the BRICS countries and other countries with emerging markets.

Furthermore, the contribution of the GDP growth gap has increased by +6 pp for the G7 countries (reaching 82.2% in 2019); by +3.4 pp for the rest of the countries with developed markets (reaching 76.8% in 2019); by +5.5 pp in the BRICS countries (reaching 56.5% in 2019); and by +4.6 pp in the rest of the countries with emerging markets (where this factor explained 58.3% of the GAI in 2019). As mentioned above, during 2020 this component's contribution to the GAI decreased in all economic groupings,





arriving at 74.3% in the G7 countries and 71.3% in the rest of the countries with developed markets, which represent the minimum values for the time period being discussed here. That contribution also decreased in the rest of the economic groupings, but without falling below the initial figures from 2017 (53.1% in the BRICS countries and 57.5% in the rest of the countries with emerging markets).

In the developed markets, the decrease in the contribution made to the GAI by the GDP growth gap has been replaced by an increase in elasticity of insurance demand in terms of the economic cycle, with that factor increasing between 2019 and 2020 by +7.4 pp in the G7 countries and by +4.8 pp in the rest of the developed markets. In the BRICS countries and the rest of the emerging markets, the factors showing an increase between 2019 and 2020 in terms of their importance for explaining the GAI were population level (+2.8 pp in the BRICS countries) and the population growth gap (+0.6 pp in the BRICS countries and +0.9 pp in the rest of the emerging markets).

When examining the relative size of the insurance potential by economic groupings and by statistical groups of countries (tiers), it can be seen that in the Life segment, size and change are proportional. In other words, the BRICS countries and the rest of the emerging markets showed the highest insurance potential and the most growth, followed by the G7 countries and the rest of the developed markets. However, it must be pointed out that during the COVID-19 crisis, the BRICS countries and the rest of the emerging markets also suffered the largest relative corrections, caused by a sharper decrease in their GAI. This dynamic is also seen when the analysis is performed by tiers, with the Tier 1 markets (those with the highest potential) having the strongest GAI correction, followed by the countries from Tier 3 and Tier 2. It is also notable that correction of the markets grouped in Tier 2 is less than the correction for those in Tier 3. The proportion of emerging markets in the ranking is generally about 70%, but this percentage is visibly higher in Tier 3 than in the other tiers. This means that during times of correction, smaller emerging economies are more vulnerable to corrections to their potential. This explains the fact that the correction seen in Tier 3 is greater than in Tier 2, with insurance potential decreasing even below the previous level (see Chart 2.4-d).

3. Results: Non-Life segment

3.1 A look at the Top 10

In the Non-Life segment ranking, the countries with their insurance markets in the top eight positions have remained largely unchanged with respect to the previous year. The exceptions are Japan and Russia, which have exchanged positions, with Japan rising two positions to number four and Russia falling two positions to number six. According to the information presented in Table 3.1-a and in Charts 3.1-a and 3.1-b, and based on their insurance potential measured using the MAPFRE GIP, the top five positions are held by China, United States, India, Japan, and Indonesia (Tier 1), followed by Russia, Germany, Brazil, the United Kingdom, and Turkey, which are at the top of the Tier 2 list.

As mentioned above, variation in the ranking compared to previous year may differ from the contents published in previous versions of this report, because of recalculations performed during the present year using updated information¹⁶. Taking this into account, it is worth highlighting the following changes in the relative positions of the countries with respect to the

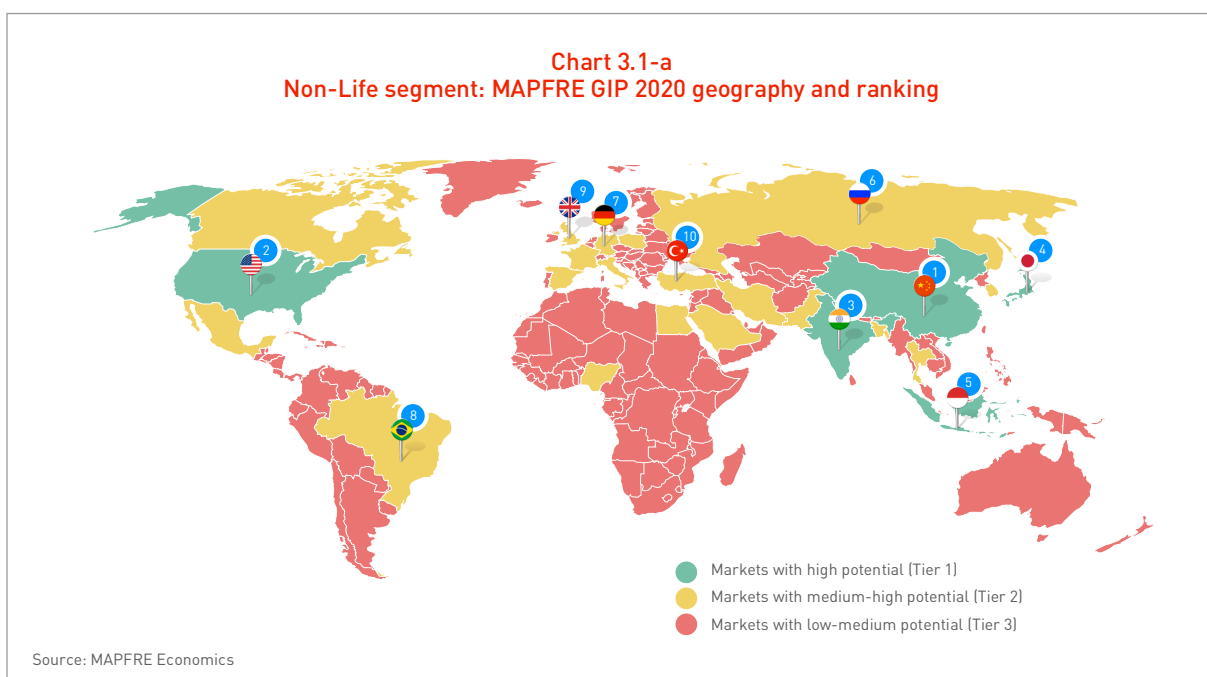


Table 3.1-a
Non-Life segment: MAPFRE GIP ranking (75+ percentile, 96 countries)

Country	MAPFRE GIP	Ranking			GAI	Years to close 2020 IPG
		2020	Δ2020-2019*	Δ2020-2010*		
Tier 1						
China	8.65	1	0	0	47.28	15
United States	4.63	2	0	1	29.31	0
India	3.99	3	0	-1	59.41	17
Japan	1.28	4	2	4	31.73	10
Indonesia	1.17	5	0	-1	46.94	25
Tier 2						
Russia	1.16	6	-2	-1	37.39	23
Germany	0.82	7	0	5	24.48	0
Brazil	0.69	8	0	-2	28.98	23
United Kingdom	0.64	9	3	21	28.11	0
Turkey	0.61	10	1	4	33.87	19
Mexico	0.58	11	-1	0	31.76	13
France	0.55	12	-3	5	23.42	0
Egypt	0.48	13	1	-3	49.38	24
Italy	0.46	14	-1	4	24.45	9
South Korea	0.45	15	2	9	26.75	0
Saudi Arabia	0.44	16	0	-7	35.93	6
Pakistan	0.42	17	1	-4	52.23	30
Iran	0.41	18	1	-11	49.49	0
Canada	0.39	19	3	9	28.55	0
Thailand	0.35	20	0	-4	36.04	6
Nigeria	0.35	21	0	-6	42.90	9
Bangladesh	0.33	22	3	5	52.80	28
Spain	0.33	23	-8	-2	24.15	1
Poland	0.32	24	0	-1	32.52	15

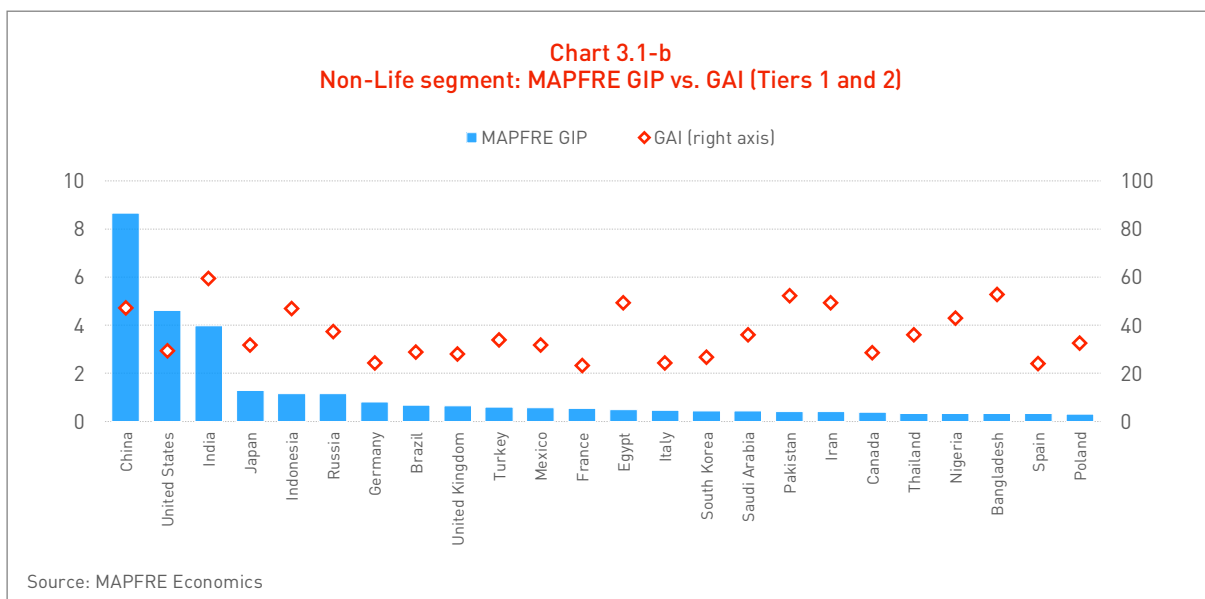
Source: MAPFRE Economics

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

* Variation in the 2020 ranking compared to previous years may differ from the contents published in previous versions of this report, because of recalculations performed in 2020 using updated information for previous years for some of the variables included in the estimation.

previous year. The United Kingdom and France have exchanged positions and are now ranked as 9th and 12th, respectively. As for the emerging markets, South Korea remains about halfway down the Tier 2 table (as in the Life segment), but it has risen by two positions and is now above Pakistan and also Iran, which now appears on this list in 18th position. Canada has risen by 3 positions with respect to the previous year.

Also, as seen in Table 3.1-b, there is 56.3% of the Non-Life insurance potential concentrated in the group of insurance markets included in Tier 1, which is 2.1 pp more than in the previous year, while approximately 11.2% of that insurance potential is concentrated in the next five countries, which is about 0.8 pp less than in 2019. Based on this information, the total decrease in the insurance potential growth levels compared to the previous year, as reflected in both the MAPFRE GIP and the GAI, has been higher for the set of



countries in Tier 1 than for those in Tier 2, and this has caused the concentration in Tier 2 to increase more than the concentration in Tier 1. It is notable that during the last decade, the change in the MAPFRE GIP ranking for the United Kingdom (+21), Germany (+5), and France (+5) stand out from the rest of the developed markets, while among the emerging markets, South Korea has gained 9 positions during that time period in the Non-Life ranking for the MAPFRE GIP. The complete list of GAI and MAPFRE GIP values for the Non-Life markets analyzed is included in Table A-2 in the Appendix to this report.

3.2 Other promising markets

In a similar way as seen in the analysis performed for the Life segment, there are certain insurance markets with a high capacity for closing the

Table 3.1-b
Non-Life segment: Concentration in the MAPFRE GIP ranking

Variable	MAPFRE GIP Non-Life segment		
	2020	2019	2010
Maximum annual rise	9	4	15
Maximum annual fall	-9	-7	-8
Threshold to Tier 2	0.31	0.35	0.20
Concentration in Tiers 1 and 2	84.3%	83.9%	84.2%
Threshold to Tier 1	1.17	1.30	1.21
Concentration in Tier 1	56.3%	54.2%	56.0%

Source: MAPFRE Economics

insurance gap and a relevant size. These present significant insurance potential for the future even though they are not included in the Top 10 countries in the MAPFRE GIP ranking. In the Non-Life segment, markets with those characteristics include Bangladesh, Pakistan, Iran, Egypt, and Nigeria. These countries show an outstanding capacity to eliminate their domestic insurance gap and grow in size, and in the medium-term, they could move ahead of other emerging markets currently in the Top 10 positions in the MAPFRE GIP ranking.

3.3 Number of years needed to close the IPG in the Non-Life segment

Based on the insurance potential estimated using the MAPFRE GIP, the amount of time needed to

Non-Life: On the radar

- Bangladesh
- Pakistan
- Iran
- Egypt
- Nigeria

In the **Non-Life segment**, these five markets could stand out during the next decade because of their ability to absorb the insurance gap.

close the domestic insurance gap in the Non-Life segment, as estimated for 2020, has decreased. Specifically, this indicator has decreased by one year for the developed markets, and it now indicates that a period of two years would be needed to close the insurance potential gap. For the emerging markets, this indicator now estimates that two fewer years would be needed (i.e., 14 years) to close the insurance gap as determined in 2020.

Analyzing these data further, it can be seen that this reduction has been influenced by an increase in Non-Life premiums, which together with a decrease in the nominal GDP, has reduced the insurance protection gap (IPG), which now could be closed in a lower number of years. It is also worth pointing out that this decrease in the number of years needed for that convergence could have been even greater, were it not for the increase in the number of years needed to close the gap in certain countries, such as Egypt and Pakistan.

On the other hand, the performance of certain emerging market countries such as India, Russia, Brazil, and Mexico is notable, where despite a decrease in their Non-Life premium volume, the size of their domestic gap has decreased (as a result of a higher penetration index caused by a decrease in nominal GDP). Because of this, fewer years would be needed in those countries to close the insurance gap and converge upon the benchmark value.

The case of China is also worth mentioning, where the number of years needed to close its insurance gap has decreased. This is due to an increase in its penetration index caused by a rise in premiums, despite a simultaneous increase in the country's GDP. In the Appendix to this report, Table A-4 presents the information regarding the number of years needed to close the IPG for each of the insurance markets analyzed, as determined in 2020 for the Non-Life segment.

3.4 Overview of insurance potential and its components in the Non-Life segment: 2017-2020

Charts 3.4-a and 3.4-b show the evolution of the Non-Life insurance potential during the period of 2017-2020, measured using the GAI and MAPFRE GIP and broken down for the various economic

groupings and tiers. In a manner similar to the results of the analysis for the Life segment, in general terms the evolution of the MAPFRE GIP and GAI figures show an upward trend during the period of 2017- 2019, with sharper increases for insurance potential during that time period in the BRICS countries and the rest of the emerging markets. However, during 2020 that trend reversed, with decreases in potential and with the index figures falling. In comparison with the Life segment, all groups of countries show a decrease in the GAI during 2020 in the Non-Life segment, but this decrease is not as noteworthy as seen in the Life segment (with the exception of the GAI for the non-BRICS emerging markets, whereas in the Life segment, the values for the Non-Life segment are lower than those recorded in 2017). A similar situation is seen in relation to evolution of the MAPFRE GIP, where because weighting is applied based on each country's GDP. The BRICS countries continue to lead in terms of growth of insurance potential, followed by the G7 countries, which take on more relevance because of the specific weight of their own GDP.

When performing a deeper analysis of the behavior of the GAI and its seven components, it can be seen that the GDP growth gap is the primary component for all economic groupings. However, although that component represents more than 70% of the GAI for the G7 countries and the rest of the developed markets, this proportion drops to about 50% for the BRICS countries and to 60% for the rest of the emerging markets (see Chart 3.4-c).

The influence of the GDP growth gap in explaining the GAI has decreased in 2020 in all economic groupings (except in the non-G7 countries with developed markets, where an increase of 0.3 pp is seen with respect to the previous year), reversing the upward trend that this component had been showing in terms of its representativeness in the GAI. However, this decrease has been less significant than the one seen in the Life segment, and the figures remain higher than those recorded for 2017. Specifically, the contribution made by this factor decreased by -0.2 pp in the insurance markets in the G7 countries, by -3.0 pp in the BRICS countries, and by -2.4 pp in the rest of the emerging markets, so that in 2020 it now explains 78.1%, 52.4%, and 60.7% of the GAI, respectively. As also occurred when analyzing insurance potential in the Life segment, the space left by this decreasing influence of the GDP growth gap has

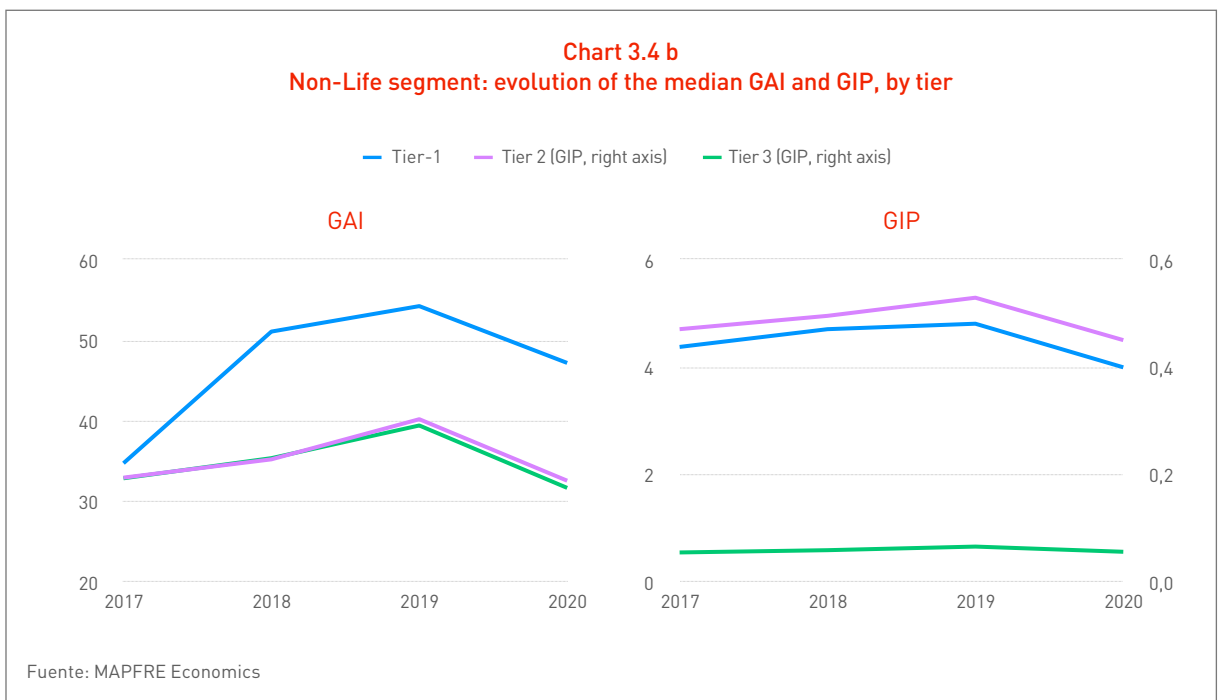
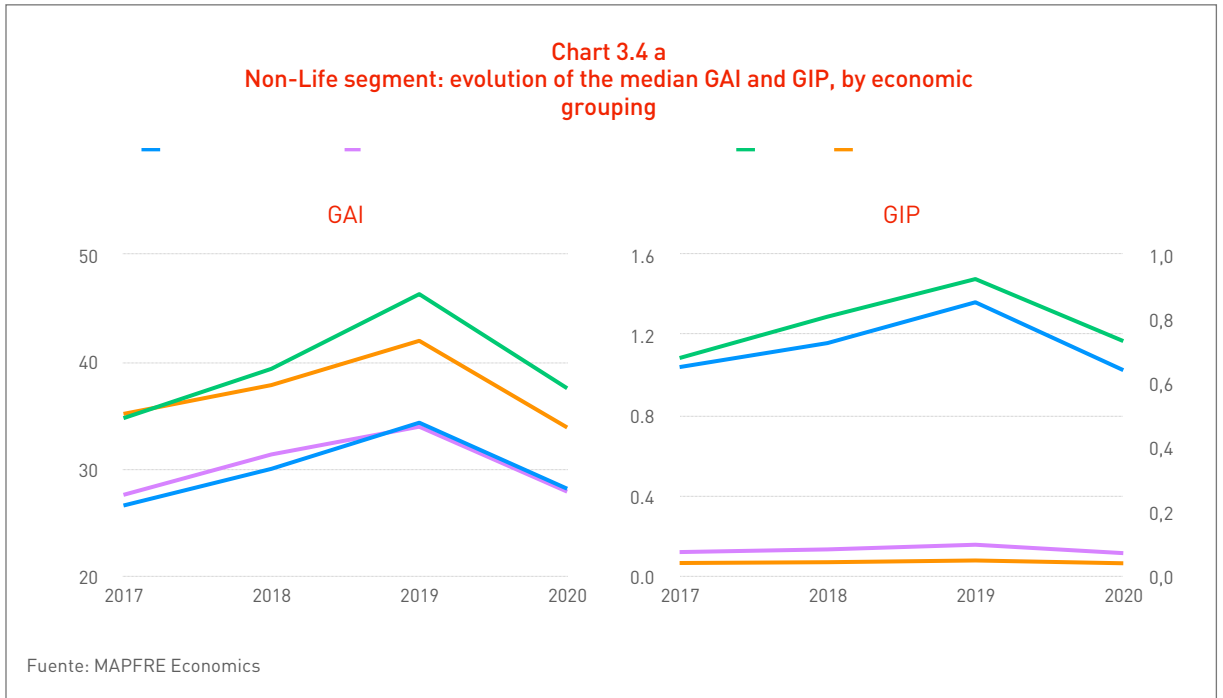
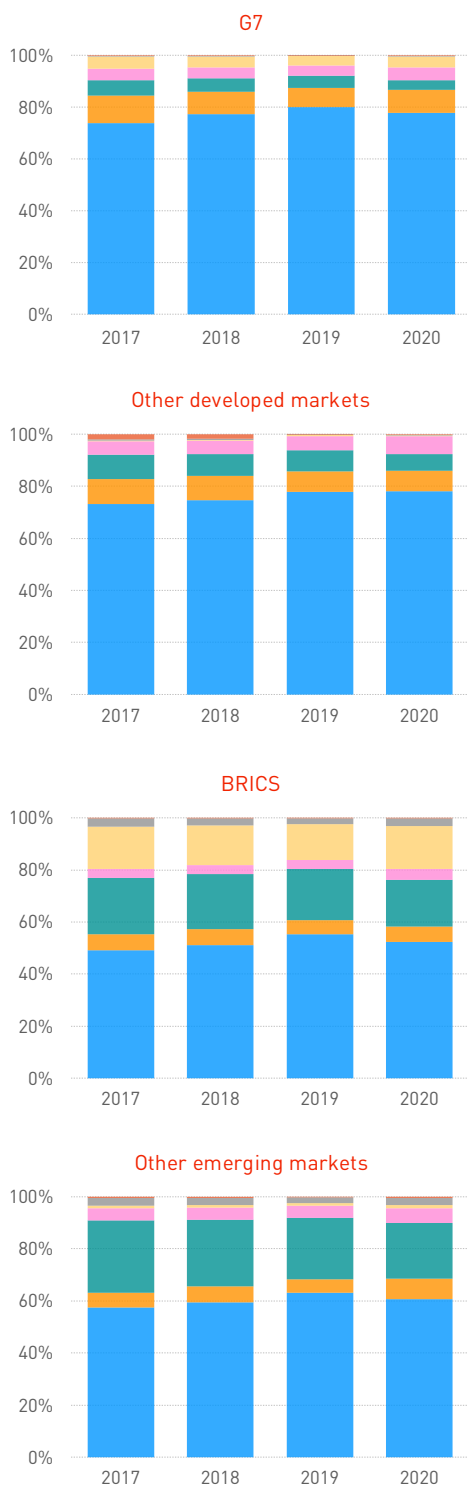


Chart 3.4-c
Non-Life segment: evolution of GAI components, by economic grouping (%)

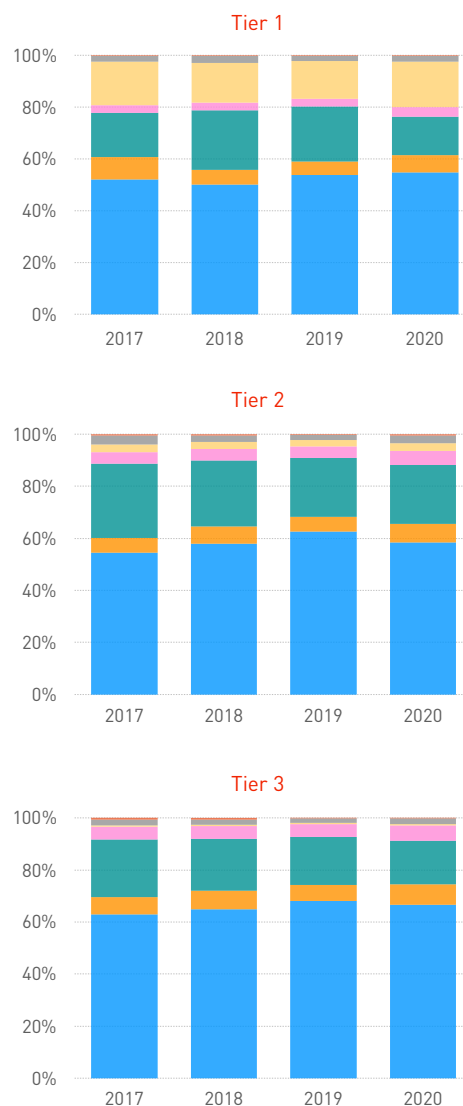
■ GDP gap ■ Alpha ■ Initial IPG
■ Population gap ■ Population size ■ GDP per capita
■ Relative penetration



Source: MAPFRE Economics

Chart 3.4-d
Non-Life segment: evolution of GAI components, by tier (%)

■ GDP gap ■ Alpha ■ Initial IPG
■ Population gap ■ Population size ■ GDP per capita
■ Relative penetration



Source: MAPFRE Economics

been replaced by a higher contribution by elasticity of demand in terms of the economic cycle and by aspects related to population.

Furthermore, with respect to the behavior seen when the countries are broken down into tiers, it can be seen that contribution of the GDP growth gap to the GAI is highest in Tier 3 (at 66.5%). It can also be seen that except in Tier 1 (where there is a change from 53.8% to 54.7%), its influence

decreases with respect to the previous year in the rest of the market groups, reversing the upward trend seen during the last four years. In Tier 1, population level (17.5%) and the IPG existing in each country (15%) explain more than 30% of the GAI, while in Tier 2 the existing IPG is the second most important factor, representing 22.7% of the explanation for that indicator. In Tier 3, the IPG (16.7%) and elasticity of demand (8%) explain almost 25% of the GAI (see Chart 3.4-d).

It must be emphasized that in the Non-Life segment, the dynamics affecting the GAI are visibly different from those existing in the Life segment. Although the previous existing ordering is maintained in terms of insurance potential (BRICS countries, other emerging markets, other developed markets, and G7 countries), the growth rates for those economic groupings up to 2019 are different. In relation to this, it can be seen that only the insurance markets in the BRICS countries have shown accelerating insurance potential, while the other markets also trend upwards but in parallel. In other words, all insurance markets show similar increases in potential over time (with economic growth, increasing consumption of insurance products, and population growth), with the exception being the BRICS countries, where that growth increased more rapidly since 2018.

Furthermore, in contrast to what was observed in the Life segment, similar corrections to all of the markets are seen during the crisis caused by the COVID-19 pandemic (with those adjustments having similar slopes). This gives the impression that when sharp decreases in income occur, the insurance markets in the BRICS countries are more sensitive to the demand for Life products than Non-Life products.

Finally, when analyzing the dynamics of insurance potential based on grouping of the countries into tiers, it is observed that countries grouped in Tier 3 and in Tier 2 have similar GAI figures over time and that they experienced similar corrections during the COVID-19 crisis. Therefore, the fact that Tier 3 is primarily comprised of emerging markets does not have an effect on insurance potential in the Non-Life segment; or in other words, the fact that a particular country is considered to be an emerging market does not significantly reduce its capacity to generate or eliminate its insurance gap. On the other hand, it is also noteworthy that although the insurance markets grouped in Tier 1 did experience some correction during the crisis in 2020, the growth of their potential had already been decelerating in 2018, probably as a sign that insurance acquisition was reaching a point of convergence.

4. Summary of conclusions

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

- 1) Because of the COVID-19 pandemic, the year 2020 was an atypical one. That crisis had an asymmetrical impact on the Life and Non-Life segments, and it also affected the various economic groupings used to analyze the emerging and developed markets in an unequal manner. At the global level, the Insurance Protection Gap (IPG) decreased by -2.4% between 2019 and 2020 (-3.9% in the Non-Life segment and -1.7% in the Life Segment). In general terms, the crisis generated by the pandemic had less of an unfavorable impact on the Non-Life segment than on the Life segment, and therefore, the penetration index was higher, and narrowing of the IPG was greater in the Non-Life segment than in the Life segment. Along with the effect on premiums mentioned above, it must be added that the COVID-19 situation had a major negative impact on global GDP, which has shown a more immediate decrease in response to the crisis, translating indirectly into a higher penetration index.
- 2) As stated in our previous MAPFRE GIP report, the initial conditions and elements related to convergence asymmetrically favor the development of insurance potential in the emerging markets, especially the large ones. When analyzed by the economic groupings constructed, on average, the insurance markets in the BRICS countries and the rest of the emerging markets have shown a favorable performance in both the Life and Non-Life segments. In those markets, the IPG as a part of GDP has increased, while decreasing in the rest of the countries, with certain exceptions such as China and South Korea where GDP has risen. In the countries with developed insurance markets, the IPG has generally decreased, although there are some cases where potential changes to the penetration index have been mitigated by offsetting of the effects of changes to GDP and premiums.
- 3) There have been few changes compared to the previous year's ranking in terms of the 10 insurance markets showing the highest potential in the Life and Non-Life segments, with the most important being those of greater economic and demographic size. Although it is not included in the Top 10 for either Life or Non-Life, it is worth mentioning South Korea because of the favorable evolution of its insurance potential in both of those segments.
- 4) There are some insurance markets, predominantly in Asia and Africa, that, although they do not occupy high positions in the MAPFRE GIP ranking, have a high national insurance potential and a relevant relative weight, which could cause their positions in that ranking to rise in the future.
- 5) Based on the estimated insurance potential and IPG existing in 2020, and assuming other factors remain the same, it can be forecast that the IPG in the Life segment could close within 7 years in the developed markets and within 20 years in the emerging markets. In the Non-Life segment, that closing of the insurance gap could occur within 2 years in the developed markets and 14 years in the emerging markets.
- 6) In general terms, in 2020 the economic effects caused by the lockdowns and social distancing measures many countries put into place in response to the COVID-19 pandemic can be seen, which have resulted in decreases to the indexes for insurance potential (including both the GAI and MAPFRE GIP). These decreases are derived from lower levels of economic activity and a slowdown in decreases to premiums

(especially in the Non-Life segment, where in some markets premiums have increased). However, it is still too soon to assess the impact that COVID-19 may have had on elements related to population during 2020, and there is a possibility of significant changes that will have an impact on the estimations for upcoming years.

7) Insurance potential does not remain stable over time, because it will change in accordance with the way its various components evolve. Based on an analysis of those components covering the period of 2017-2020, it can be seen that their effect will be different depending on each economy's grouping as either developed or emerging. In the developed economies, the effects of income and elasticity of demand are dominant, while in the emerging

markets, the primary effects are related to their size and the need to achieve convergence. These differences have in turn led to differing behavior in those economic groupings in terms of developing insurance potential. With the emerging markets, higher potential corresponds with larger populations and GDP figures, given the needs for convergence in those markets.

8) In the Non-Life segment, in 2020 there were generalized and similar corrections seen in the global insurance potential. However, this was not the case in the Life segment, where it can be seen that the largest emerging markets, and those with the highest potential, were also the markets that experienced the most abrupt corrections.

Methodological considerations for the MAPFRE GIP

Production of the MAPFRE Global Insurance Potential Index (MAPFRE GIP) is based upon an analysis of the dynamics of the Insurance Protection Gap (IPG). The IPG calculated for a particular country or economic grouping represents the difference between the amount of insurance coverage that is economically necessary and beneficial to society and the amount of coverage that is actually acquired. Establishing this figure helps define the potential market for insurance, which is the market size that could be achieved through elimination of the insurance gap. This means that the IPG is not a static concept. Instead, it is one that evolves in accordance with the growth of a country's economy and population, while also being affected by emergence of new risks that are inherent to ongoing economic and social development.

In general terms, the IPG can be measured using two approaches. The first is an ex-post approach based on losses observed. In this case, the IPG will be calculated as the difference between the economic losses recorded during a specific period and the portion of those losses that were covered by insurance compensation. The second is an ex-ante approach based on an analysis of optimal protection levels, which are estimated based on a comparison between the level of coverage that is socially and economically adequate to cover the risks and the actual level of protection. For the fiscal year being discussed in this report, and in keeping with the methodology followed in other reports produced by MAPFRE Economics, we have applied the second approach, i.e., calculating IPG as a differential based on penetration (premiums/GDP), between each market being analyzed and a theoretical benchmark.

For the purposes of calculating the MAPFRE GIP, the benchmark used for comparisons of density and penetration corresponds to the 90th percentile in the distribution formed by a sample of 96 insurance markets. This use of the 90th

percentile ensures that there are at least 9 countries above the benchmark, while also ensuring that the benchmark will not be an atypically high figure resulting from measurement errors. This allows the benchmark density and penetration measurements to remain at stable levels over time, ensuring that the IPG and its evolution are accurate and reliable.

After the parameters that affect the IPG had been defined, a simulation method was developed, based on a series of initial conditions and growth differentials relating to income levels, population, and the elasticity of insurance premiums in terms of the economic cycle. In this way, comparison of the results of the simulation with the results from the initial definition allowed measurement of the effectiveness of the projections and their predictive capacity. This process allowed identification of the most significant variables for estimating the insurance gap, and these have been selected for use in calculating the MAPFRE GIP. Specifically, seven re-scaled and standardized variables between 0 and 1 were selected, where 0 indicates a low impact on market potential and 1 indicates the maximum potential. These variables are: (i) the initial IPG; (ii) the relative penetration compared to the benchmark; (iii) the relative elasticity of premiums to income level, compared to the benchmark; (iv) the relative GDP per capita; (v) the GDP growth gap; (vi) the population growth gap; and (vii) population size.

Use of these variables allows two measurements to be generated, which contribute complementary dimensions to the analysis. The first of these is the GAI (Gap Absorption Index), which produces a point score and a relative position (ranking) based on each market's potential to close its insurance gap. This can be seen as similar to a speed of convergence towards the penetration and density levels selected as the benchmark. The second is the Global Insurance Potential Index

(MAPFRE GIP), which provides a point score and ranking that puts each market in an order based on 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). This makes the MAPFRE GIP comparable to a measurement of the “size of the market”. In this way, the MAPFRE GIP is able to produce forecasts that are consistent with the actual performance observed. In other words, the cases where this indicator suggests a high

insurance potential and the ones where the largest contributions toward closing the global IPG have actually occurred.

The corresponding methodological details can be found in the report: MAPFRE Economic Research (2018), *Global Insurance Potential Index*, Madrid, Fundación MAPFRE.

Appendix: Table A-1
Life segment: Worldwide MAPFRE GIP ranking and GAI values

Country	MAPFRE GIP	Ranking			GAI	Country	MAPFRE GIP	Ranking			GAI Δ2020-2019*
		2020	Δ2020-2019*	Δ2020-2010*				2020	Δ2020-2019*	2020	
China	9.220	1	0	0	50.39	Hong Kong	0.089	49	0	12	26.67
United States	5.518	2	0	1	34.96	Kenya	0.085	50	4	8	47.02
India	3.676	3	0	-1	54.75	Portugal	0.084	51	2	16	31.31
Russia	1.214	4	0	0	38.96	Hungary	0.083	52	-5	-1	34.02
Japan	1.155	5	2	6	28.65	Angola	0.078	53	-1	-9	48.04
Indonesia	1.133	6	-1	-1	45.52	Morocco	0.075	54	-3	-7	36.44
Germany	1.016	7	-1	5	30.16	Denmark	0.075	55	3	16	28.22
Brazil	0.782	8	1	-2	32.88	Qatar	0.071	56	0	-21	36.43
Mexico	0.671	9	1	4	36.67	Norway	0.069	57	0	-1	27.00
Turkey	0.670	10	-2	-1	37.49	Greece	0.069	58	-3	-8	29.90
France	0.620	11	0	10	26.40	Dominican Rep.	0.062	59	0	1	42.01
United Kingdom	0.566	12	0	25	24.88	Kuwait	0.061	60	0	-14	37.43
Saudi Arabia	0.512	13	0	-6	41.70	Finland	0.059	61	2	16	27.70
Egypt	0.472	14	1	-4	48.54	New Zealand	0.059	62	2	6	34.75
Italy	0.459	15	-1	12	24.42	Ecuador	0.054	63	-2	-10	37.60
South Korea	0.453	16	1	13	26.91	Bulgaria	0.050	64	-2	-7	39.16
Pakistan	0.424	17	1	-3	52.27	Guatemala	0.047	65	3	0	42.02
Spain	0.421	18	-2	1	30.74	Slovakia	0.042	66	-1	-4	32.17
Canada	0.408	19	1	4	29.65	Oman	0.041	67	0	-19	38.62
Iran	0.393	20	-1	-12	47.36	Serbia	0.039	68	1	-5	38.88
Poland	0.354	21	0	-3	36.06	Tunisia	0.036	69	-3	-5	38.93
Thailand	0.339	22	1	-6	35.32	Panama	0.033	70	0	8	37.81
Nigeria	0.337	23	-1	-8	41.75	Jordan	0.032	71	1	-5	40.45
Bangladesh	0.321	24	2	10	50.87	Costa Rica	0.030	72	3	2	37.73
Australia	0.314	25	2	5	30.85	Lithuania	0.029	73	0	2	36.12
Philippines	0.288	26	-2	-6	41.57	Croatia	0.028	74	-3	-4	32.56
Vietnam	0.283	27	1	1	44.57	Bahrain	0.022	75	1	1	40.01
Netherlands	0.247	28	1	12	31.78	Lebanon	0.020	76	-2	-7	31.50
Argentina	0.237	29	-4	-12	33.30	Slovenia	0.020	77	0	4	31.40
Malaysia	0.221	30	0	2	32.46	Uruguay	0.019	78	1	-6	32.50
Colombia	0.219	31	0	0	39.23	Luxembourg	0.019	79	2	7	33.04
Ukraine	0.212	32	0	-8	51.58	El Salvador	0.017	80	-2	4	39.94
Romania	0.187	33	0	3	40.34	Latvia	0.015	81	-1	-2	33.48
UAE	0.179	34	0	-9	34.79	Estonia	0.014	82	1	3	35.35
Algeria	0.158	35	0	-9	42.37	Zimbabwe	0.012	83	10	-1	36.92
Kazakhstan	0.150	36	0	-3	39.68	Botswana	0.011	84	0	3	36.33
South Africa	0.137	37	0	5	25.32	Cyprus	0.009	85	0	3	32.83
Switzerland	0.129	38	3	11	27.87	Macau	0.008	86	-4	-13	29.35
Belgium	0.129	39	-1	15	28.50	Trinidad and Tobago	0.008	87	-1	-4	28.43
Chile	0.124	40	3	3	34.29	Jamaica	0.007	88	0	1	32.86
Czech Republic	0.116	41	-2	4	34.54	Malta	0.007	89	0	3	39.76
Sweden	0.115	42	3	17	27.08	Mauritius	0.006	90	-3	0	31.58
Austria	0.114	43	-3	9	30.84	Iceland	0.006	91	0	2	36.61
Ireland	0.113	44	4	36	32.13	Namibia	0.005	92	-2	-1	28.40
Singapore	0.112	45	-1	-6	26.51	Bahamas	0.003	93	-1	1	30.39
Peru	0.112	46	-4	-8	37.87	Barbados	0.001	94	0	1	27.37
Sri Lanka	0.096	47	-1	-6	43.77	Liechtenstein	0.000	95	0	1	4.20
Israel	0.095	48	2	7	32.68	Venezuela	0.000	96	0	-74	27.19

Source: MAPFRE Economics

* Variation in the ranking compared to previous years may differ from the contents published in previous versions of this report, because of recalculations performed in 2020 using updated information for previous years for some of the variables included in the estimation.

Appendix: Table A-2
Non-Life segment: Worldwide MAPFRE GIP ranking and GAI values

Country	MAPFRE GIP	Ranking			GAI	Country	MAPFRE GIP	Ranking			GAI
		2020	Δ2020-2019*	Δ2020-2010*				2020	Δ2020-2019*	Δ2020-2010*	
China	8.663	1	0	0	47.34	Austria	0.090	49	-6	5	24.24
United States	4.626	2	0	1	29.31	Kenya	0.085	50	4	9	47.07
India	3.998	3	0	-1	59.54	Hungary	0.082	51	-1	7	33.68
Japan	1.281	4	2	4	31.78	Denmark	0.081	52	4	17	30.34
Indonesia	1.175	5	0	-1	47.21	Norway	0.072	53	2	2	28.14
Russia	1.169	6	-2	-1	37.53	Morocco	0.071	54	-1	-2	34.27
Germany	0.826	7	0	5	24.50	Portugal	0.070	55	-6	2	26.07
Brazil	0.691	8	0	-2	29.06	Finland	0.067	56	4	10	31.59
United Kingdom	0.641	9	3	21	28.16	Qatar	0.064	57	0	-22	32.99
Turkey	0.608	10	1	4	33.98	Angola	0.062	58	0	-11	37.97
Mexico	0.583	11	-1	0	31.86	Greece	0.060	59	-7	-8	26.04
France	0.551	12	-3	5	23.45	Kuwait	0.060	60	1	-16	36.55
Egypt	0.484	13	1	-3	49.81	New Zealand	0.053	61	5	17	31.04
Italy	0.460	14	-1	4	24.50	Dominican Rep.	0.051	62	-3	-1	34.87
South Korea	0.451	15	2	9	26.77	Ecuador	0.045	63	-1	-3	30.85
Saudi Arabia	0.442	16	0	-7	36.02	Bulgaria	0.043	64	1	-1	33.65
Pakistan	0.428	17	1	-4	52.76	Slovakia	0.042	65	-2	-1	31.77
Iran	0.411	18	1	-11	49.49	Guatemala	0.041	66	-2	-4	36.79
Canada	0.394	19	3	9	28.57	Oman	0.039	67	0	-14	36.81
Nigeria	0.355	20	1	-5	43.99	Serbia	0.036	68	2	-1	35.74
Thailand	0.346	21	-1	-5	36.11	Tunisia	0.033	69	0	-4	35.58
Bangladesh	0.342	22	3	5	54.15	Lithuania	0.030	70	2	6	36.16
Spain	0.331	23	-8	-2	24.18	Jordan	0.029	71	2	-3	36.84
Poland	0.319	24	0	-1	32.58	Panama	0.027	72	-4	7	30.65
Vietnam	0.306	25	1	1	48.16	Croatia	0.025	73	-2	4	29.22
Philippines	0.296	26	-3	-6	42.65	Costa Rica	0.024	74	0	1	29.85
Australia	0.281	27	2	5	27.66	Bahrain	0.021	75	2	-1	37.96
Malaysia	0.249	28	0	-3	36.55	Lebanon	0.019	76	-1	-3	29.77
Netherlands	0.193	29	1	12	24.84	Slovenia	0.017	77	4	8	27.27
Ukraine	0.190	30	3	6	46.33	Luxembourg	0.017	78	1	6	29.89
Romania	0.180	31	1	8	38.69	Uruguay	0.017	79	1	-7	28.22
Argentina	0.172	32	-5	-13	24.20	El Salvador	0.015	80	-2	0	37.16
South Africa	0.170	33	1	5	31.49	Latvia	0.015	81	1	1	32.14
Colombia	0.170	34	-3	-3	30.42	Estonia	0.013	82	1	5	33.88
Algeria	0.166	35	0	-13	44.48	Botswana	0.012	83	1	3	40.14
UAE	0.163	36	1	-7	31.55	Zimbabwe	0.010	84	9	-3	30.33
Kazakhstan	0.152	37	-1	-3	40.21	Macau	0.009	85	-9	-15	32.23
Sweden	0.132	38	4	11	31.01	Cyprus	0.007	86	-1	2	27.80
Switzerland	0.130	39	8	11	27.90	Trinidad and Tobago	0.006	87	-1	-4	23.01
Singapore	0.130	40	-1	-3	30.67	Namibia	0.006	88	2	2	33.34
Belgium	0.114	41	-3	7	25.23	Mauritius	0.006	89	-2	0	30.42
Ireland	0.112	42	4	29	31.79	Malta	0.006	90	-1	2	34.04
Czech Republic	0.109	43	1	3	32.45	Iceland	0.005	91	0	3	34.06
Chile	0.107	44	-4	-2	29.75	Jamaica	0.005	92	-4	-1	24.58
Hong Kong	0.101	45	0	0	30.32	Bahamas	0.002	93	-1	0	23.24
Peru	0.100	46	-5	-6	33.86	Barbados	0.001	94	0	1	21.94
Israel	0.099	47	4	9	34.05	Liechtenstein	0.000	95	0	1	0.00
Sri Lanka	0.092	48	0	-5	42.13	Venezuela	0.000	96	0	-63	0.00

Source: MAPFRE Economics

* Variation in the ranking compared to the previous years may differ from the contents published in previous versions of this report, because of recalculations performed in 2020 using updated information for previous years for some of the variables included in the estimation.

Appendix: Table A-3
Life segment: number of years needed to close
the 2020 domestic IPG

Country	Years	Country	Years
China	38	Hong Kong	0
United States	10	Kenya	27
India	6	Portugal	2
Russia	37	Hungary	31
Japan	0	Angola	29
Indonesia	34	Morocco	10
Germany	11	Denmark	0
Brazil	22	Qatar	21
Mexico	23	Norway	6
Turkey	35	Greece	20
France	0	Dominican Rep.	24
United Kingdom	0	Kuwait	28
Saudi Arabia	32	Finland	0
Egypt	31	New Zealand	12
Italy	0	Ecuador	25
South Korea	0	Bulgaria	30
Pakistan	38	Guatemala	24
Spain	8	Slovakia	20
Canada	5	Oman	29
Iran	4	Serbia	17
Poland	31	Tunisia	23
Thailand	26	Panama	9
Nigeria	33	Jordan	27
Bangladesh	25	Costa Rica	22
Australia	5	Lithuania	24
Philippines	17	Croatia	20
Vietnam	7	Bahrain	26
Netherlands	9	Lebanon	5
Argentina	18	Slovenia	23
Malaysia	3	Uruguay	14
Colombia	23	Luxembourg	0
Ukraine	27	El Salvador	23
Romania	28	Latvia	24
UAE	25	Estonia	22
Algeria	30	Zimbabwe	11
Kazakhstan	19	Botswana	19
South Africa	0	Cyprus	12
Switzerland	9	Macau	0
Belgium	9	Trinidad and Tobago	11
Chile	10	Jamaica	17
Czech Republic	22	Malta	0
Sweden	0	Mauritius	16
Austria	15	Iceland	36
Ireland	0	Namibia	19
Singapore	0	Bahamas	8
Peru	22	Barbados	11
Sri Lanka	29	Liechtenstein	---
Israel	18	Venezuela	---

Source: MAPFRE Economics

Appendix: Table A-4
Non-Life segment: number of years needed to
close the 2020 domestic IPG

Country	Years	Country	Years
China	15	Austria	1
United States	0	Kenya	16
India	17	Hungary	21
Japan	10	Denmark	3
Indonesia	25	Norway	3
Russia	23	Morocco	2
Germany	0	Portugal	4
Brazil	23	Finland	3
United Kingdom	0	Qatar	6
Turkey	19	Angola	26
Mexico	13	Greece	10
France	0	Kuwait	21
Egypt	24	New Zealand	0
Italy	9	Dominican Rep.	0
South Korea	0	Ecuador	11
Saudi Arabia	6	Bulgaria	22
Pakistan	30	Slovakia	19
Iran	0	Guatemala	19
Canada	0	Oman	24
Nigeria	6	Serbia	21
Thailand	9	Tunisia	14
Bangladesh	28	Lithuania	19
Spain	1	Jordan	18
Poland	15	Panama	3
Vietnam	35	Croatia	4
Philippines	19	Costa Rica	11
Australia	0	Bahrain	23
Malaysia	12	Lebanon	0
Netherlands	0	Slovenia	0
Ukraine	24	Luxembourg	0
Romania	22	Uruguay	21
Argentina	45	El Salvador	17
South Africa	19	Latvia	16
Colombia	7	Estonia	13
Algeria	24	Botswana	17
UAE	19	Zimbabwe	3
Kazakhstan	38	Macau	15
Sweden	3	Cyprus	7
Switzerland	0	Trinidad and Tobago	2
Singapore	3	Namibia	6
Belgium	0	Mauritius	8
Ireland	5	Malta	0
Czech Republic	12	Iceland	0
Chile	19	Jamaica	0
Hong Kong	8	Bahamas	0
Peru	12	Barbados	0
Israel	1	Liechtenstein	--
Sri Lanka	1	Venezuela	--

Source: MAPFRE Economics

Index of Tables and Charts

Tables

Table 1	Variation in the main variables for the MAPFRE GIP, by economic grouping and insurance segment	15
Table 2.1-a	Life segment: MAPFRE GIP ranking (75+ percentile, 96 countries)	22
Table 2.1-b	Life Segment: Concentration in the MAPFRE GIP ranking	23
Table 3.1-a	Non-Life segment: MAPFRE GIP ranking (75+ percentile, 96 countries)	30
Table 3.1-b	Non-Life segment: Concentration in the MAPFRE GIP ranking	31
Table A-1	Life segment: Worldwide MAPFRE GIP ranking and GAI values	41
Table A-2	Non-Life segment: Worldwide MAPFRE GIP ranking and GAI values	42
Table A-3	Life segment: number of years needed to close the 2020 domestic IPG	43
Table A-4	Non-Life segment: number of years needed to close the 2020 domestic IPG	43

Charts

Chart 1.2-a	Evolution of absolute global IPG, by market segment	13
Chart 1.2-b	Evolution of relative global IPG, by market segment	13
Chart 1.2-c	Structure of global IPG, by market segment, 1990-2020	14
Chart 1.2-d	Growth of global IPG, by market segment	14
Chart 1.2-e	Evolution of global IPG in the Life segment, by economic grouping	15
Chart 1.2-f	Evolution of global IPG in the Non-Life segment, by economic grouping	15
Chart 1.2-g	Structure of global IPG in the Life segment, by economic grouping, 1990-2020	16
Chart 1.2-h	Structure of global IPG in the Non-Life segment, by economic grouping, 1990-2020	16
Chart 1.2-i	IPG as a multiple of the Life market	17
Chart 1.2-j	IPG as a multiple of the Non-Life market	17
Chart 2.1-a	Life segment: geography and ranking for MAPFRE GIP 2021	21
Chart 2.1-b	Life segment: MAPFRE GIP vs. GAI (Tiers 1 and 2)	23
Chart 2.4-a	Life segment: evolution of median GAI and GIP, by economic grouping	25
Chart 2.4-b	Life segment: evolution of median GAI and GIP, by tier	25
Chart 2.4-c	Life segment: evolution of GAI components, by economic grouping	26
Chart 2.4-d	Life segment: evolution of GAI components, by tier	27
Chart 3.1-a	Non-Life segment: geography and ranking for MAPFRE GIP 2021	29
Chart 3.1-b	Non-Life segment: MAPFRE GIP vs. GAI (Tiers 1 and 2)	31
Chart 3.4-a	Non-Life segment: evolution of median GAI and GIP, by economic grouping	33
Chart 3.4-b	Non-Life segment: evolution of median GAI and GIP, by tier	33
Chart 3.4-c	Non-Life segment: evolution of GAI components, by economic grouping	34
Chart 3.4-d	Non-Life segment: evolution GAI components, by tier	34

References

- 1) See: MAPFRE Economic Research (2018), *Global Insurance Potential Index*, Madrid, Fundación MAPFRE.
- 2) See: MAPFRE Economics (2020), *MAPFRE GIP 2020*, Madrid, Fundación MAPFRE.
- 3) For example, in 2020 the improvement of the IPG and its reduction with respect to 2019 in absolute terms has been due more to the indirect negative impact of the COVID-19 pandemic on worldwide GDP, than to the direct effect on the penetration index derived from higher increases in insurance premiums with respect to an optimal amount of potential growth.
- 4) The first five variables are initial conditions, with the first and fifth referring to levels at the initial absolute size, while the second, third, and fourth variables refer to comparison with the ideal insurance situation, represented here by the benchmark. In this way, a perspective is provided for each of the markets regarding the margin of convergence towards the benchmark values. On the other hand, the sixth variable is dynamic, and it expresses the capacity for convergence (in terms of income and, implicitly, demand for insurance) towards the benchmark over time. All of these variables, except for the second and fourth, have a positive effect on the potential. See: MAPFRE Economic Research (2018), *Global Insurance Potential Index*, Madrid, Fundación MAPFRE, pp. 15- 17.
- 5) The Gap Absorption Index (GAI) is an index that indicates the capacity for closing the insurance gap, over the medium-term and long-term in a particular country. It is obtained from the weighted sum of each of the variables used, and it is therefore very sensitive to underlying macroeconomic and industry conditions. This can cause it to vary from one year to the next. This indicator provides information about each country's insurance potential with respect to its own market, rather than as a proportion of the global potential. On the other hand, the Global Insurance Potential Index (MAPFRE GIP) provides a point score and ranking that puts each market in order based on 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). This makes the MAPFRE GIP comparable to a measurement of the "size of the market". The MAPFRE GIP is calculated by scaling the GAI point score by the relative size of each market. In this way, the local insurance potential obtained through the GAI is weighted based on each market's weight on the global market, thereby providing a measurement of each market's contribution to the global insurance potential.
- 6) The benchmark is statistically represented by the values of the insurance market located at the 90th percentile of the penetration distribution based on Life and Non-Life premiums. Using the data from 2020, the benchmark values would correspond to Canada for the market as a whole, to Australia for the Non-Life segment, and to Japan for the Life segment. For comparison, in the analysis discussed in our previous report using data from 2019, the benchmark values would correspond to Japan for the market as a whole, to Australia for the Non-Life segment, and to South Korea for the Life segment.
- 7) It is important to point out that the IPG figures calculated for previous years have been modified compared to the contents appearing in previous reports, because statistical updates were made to the values used during previous years in relation to GDP and premiums. This has implications for calculation of the insurance potential for some countries, and it therefore could produce changes to their position in the global ranking.
- 8) The following countries are included in the BRICS economic grouping: Brazil, Russia, India, China, and South Africa.

9) The G7 economic grouping includes Germany, Canada, the United States, France, Italy, Japan, and the United Kingdom.

10) As in previous reports on the MAPFRE GIP, when calculating averages for economic groupings of countries, data from some countries has been excluded because it distorted the sample, either because of a country's size or its particular situation: San Marino, Liechtenstein, Barbados, Bahrain, and Qatar.

11) This report does not take into account the 7.752 billion people who, according to United Nations data, made up the world's population in 2020, since it covers only a sample of 96 countries rather than the full global population.

12) A statistical review of the sources of information for premium volumes in the markets analyzed has produced minor changes to the MAPFRE GIP point scores, and therefore to each country's insurance potential and ranking, and to year-on-year variations in those rankings.

13) It must be pointed out that when calculating the MAPFRE GIP for that year, as expressed in this version of the report, the data used for premiums and GDP were updated and revised compared to the figures used in previous years. Therefore, the estimated insurance potential for some countries may have undergone minor changes, although in all cases this only caused an exchange of positions. This occurred only in a very small number of cases in the Tier 2 list for both the Life and Non-Life segments, and it does not affect the comparative interpretation of the rankings.

14) Taking into account updated data for 2019.

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

16) As one example, among other cases, the data for Iran for 2018 and 2019 were provisional and were updated in 2020.

Other reports from MAPFRE Economics

MAPFRE Economics (2021), *The Spanish Insurance Market in 2020*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2021), *2020 Ranking of the Largest European Insurance Groups*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2021), *2020 Ranking of Insurance Groups in Latin America*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2021), *2021 Economic and Industry Outlook: Perspectives on the second quarter*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2021), *A Global Perspective on Pension Systems*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2021), *Insurance Industry Investments*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2021), *2021 Economic and Industry Outlook*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2020), *The Latin American Insurance Market in 2019*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2020), *Elements for the Development of Life Insurance*, Madrid, Fundación MAPFRE.

MAPFRE Economics (2020), *Financial Inclusion in Insurance*, Madrid, MAPFRE Economics.

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

MAPFRE Economic Research (2018), *Health Systems: A global analysis*, 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.

Interactive version of the MAPFRE GIP

Access the interactive version of the
Global Insurance Potential Index,
along with all of the latest news from
MAPFRE Economics



NOTICE

This document has been prepared by MAPFRE Economics for information purposes only. It does not reflect the views or opinions of MAPFRE or Fundación MAPFRE. The document presents and compiles data, views and estimates relative to the time at which it was prepared. These were prepared directly by MAPFRE Economics or otherwise obtained from or prepared using sources considered reliable, but which have not been independently verified by MAPFRE Economics. Therefore, MAPFRE and Fundación MAPFRE specifically refuse all liability with respect to its precision, integrity or correctness.

The estimates contained in this document have been prepared on the basis of widely accepted methodologies and should be treated as forecasts or projections only, given that the results obtained from positive or negative historical data cannot be considered as a guarantee of future performance. Equally, this document and its contents are also subject to changes that will depend on variables such as the economic outlook or market performance. MAPFRE and Fundación MAPFRE therefore refuse all liability with respect to how up to date or relevant these contents may be, or with respect to providing any related notices.

This document and its contents do not constitute any form of offer, invitation or solicitation to purchase, participate or divest in financial assets or instruments. This document and its contents cannot form part of any contract, commitment or decision of any type. With regard to the investment in financial assets connected with the economic variables analyzed in this document, readers of this study must be aware that under no circumstances should they base their investment decisions on the information given in this document. People or companies offering investment products to potential investors are legally bound to provide the necessary information by which to make a suitable investment decision. For all of the foregoing, MAPFRE and Fundación MAPFRE specifically refuse all liability for any direct or indirect harm, loss or damage that may ensue from the use of this document or its contents for these purposes.

The contents of this document are protected by intellectual property laws. The information contained in this study may be reproduced in part, provided the source is cited.

MAPFRE GIP 2021

Based on an analysis of the economic and demographic factors that lead to increases or decreases in the Insurance Protection Gap, and on measurement of each country's capacity to close the insurance gap in its own market, the MAPFRE GIP Index (Global Insurance Potential Index) provides a scoring system and ranking that places insurance markets in order based upon their potential contribution to closing the global insurance gap.

This report produced by MAPFRE Economics updates the MAPFRE GIP estimations for insurance markets in 96 countries, providing a comparative perspective on the global potential to expand the insurance industry in the coming years.