MAPFRE GIP 2023

Fundación MAPFRE

MAPFRE GIP 2023: GLOBAL INSURANCE POTENTIAL INDEX

MAPFRE Economics

MAPFRE GIP 2023

Global Insurance Potential Index

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Contents

Introduction

The Global Insurance Potential Index (MAPFRE GIP) is an indicator developed by MAPFRE Economics to provide a comprehensive view of the opportunities and challenges in insurance market. This index is based on several indicators and metrics that assess the capacity of insurance markets around the world to create and use the Insurance Protection Gap (IPG), i.e. the difference between the need for protection and the actual coverage in place.

MAPFRE GIP is calculated for 96 insurance markets, covering both developed and emerging countries. In addition to the IPG, the index considers other variables such as insurance penetration (premiums/GDP), the size of the economy, and the population. The index provides a score that ranks each market according to its capacity to close the global insurance gap. So, to be ranked high in this ranking, markets must have a significant economy measured in terms of GDP and demonstrate the ability to reduce their own insurance gap. According to the data provided in the report, in 2022, the global insurance gap totaled $7.8 trillion, 14.3% more than in the previous year, equivalent to 7.8% of global GDP. This figure is distributed 69.1% in the Life insurance segment and the remaining 30.9% in the Non-Life segment, representing $5.401 trillion and $2.412 trillion, respectively. In addition, more than 77.6% of the current insurance gap is in emerging countries, indicating strong growth potential in these markets.

Finally, the report highlights the category of "promising markets," which are countries with strong potential to close their insurance gap but that do not yet have a sufficiently significant economic influence. This positions them lower in the ranking, although they represent an important source of insurance potential in the future. If these promising markets increase in economic size over time, they could overtake other emerging markets in the insurance potential index in the long term.

MAPFRE Economics

1. The MAPFRE GIP: General aspects

There is considerable variability in insurance levels in countries around the world, which is influenced by a number of factors ranging from economic and demographic conditions to each region's insurance culture. This diversity reflects how insurance plays a crucial role in managing and offsetting risks in economic activities, as well as in creating business opportunities where there is asymmetric information. It has been shown that in countries with more developed insurance activity, the economy tends to prosper. This is because insurance activity helps to limit the risk for many procyclical economic activities, thus having a beneficial effect on society as a whole.

In this context, the Global Insurance Potential Index (MAPFRE GIP) is a tool that seeks to compare and evaluate this industry's economic structure, insurance levels, and potential for expansion in 96 countries. Despite the differences in economic interaction between these countries, the index provides a uniform assessment of the potential for developing insurance activity in each society and economy. The next section describes the methodology used to build the indicator. However, a more detailed explanation of the methodology underlying the indicator can be found in the initial MAPFRE GIP[1] series report.

1.1 The insurance gap and insurance potential

Fundamentally, the Global Insurance Potential Index (MAPFRE GIP) is based on the estimate of the Insurance Protection Gap (IPG). As noted in previous versions of this report, the IPG represents the difference between the insurance coverage that is economically necessary and beneficial to society and the amount of insurance coverage that is actually acquired. By its nature, this concept is by no means static, since the insurance gap evolves with the growth of the economy, the population, and the emergence of new risks associated with each country's economic and social development.

Methodologically, the IPG can be measured in two ways. The first is an *ex-post* approach, which is based on the magnitude of observed losses. Under this first approach, the gap is calculated as the difference between the economic losses recorded in a given period and the portion of those losses covered by insurance. A second approach is to employ an *ex-ante* method, which entails analyzing the optimal theoretical levels of insurance protection and comparing them with the actual risk coverage in a country. This report uses the latter approach, similar to the methodological approach followed in other reports written by MAPFRE Economics, where the IPG is defined as the difference in insurance penetration (premiums/GDP) between the market in question and a theoretical benchmark that represents the potential optimal insurance coverage. The IPG is therefore considered non-existent in a country when this difference is close to zero, which means that the actual insurance market is close to the desired potential market.

As a result, quantitatively, the insurance gap tends to decrease as the actual penetration of the insurance market increases, and, qualitatively, it also tends to decrease as markets become more sophisticated and mature. Thus, sustained economic growth, increased disposable income, a developed financial system, efficient regulation, and public policies that promote financial inclusion and education are factors that contribute to reducing the IPG.

1.2 Components of the MAPFRE GIP

In this update of the MAPFRE GIP, as in previous versions,[2] data corresponding to

2022 have been used for 96 countries and the seven variables comprising the index. These variables are:

1. Insurance gap in each country.
2. Relative insurance penetration (insurance premiums/GDP).
3. Elasticity of insurance demand in terms of the economic cycle.
4. Relative GDP per capita.
5. Population size.
6. Growth gap in terms of population.
7. Growth gap in terms of GDP.

It is important to note that the first five variables are initial conditions, where the first and fifth refer to the initial absolute levels, while the second, third, and fourth relate to the comparison between the current state of insurance and an ideal state represented by a benchmark,[3] which provides a perspective on each market's margin of movement towards the ideal values. The sixth and seventh variables are dynamic and reflect a country's ability to move (in terms of income and insurance demand) towards the benchmark over time. This set of variables has a positive effect on insurance potential, except for the second and fourth.[4]

The level and development of these variables will determine the evolution of insurance potential, which is reflected in the following markers: the GAI (Gap Absorption Index) and the MAPFRE GIP (Global Insurance Potential Index). The GAI measures a country's capacity to close the insurance gap in the medium and long term. It is calculated as a weighted sum of the aforementioned variables and is sensitive to underlying sectoral and macroeconomic conditions. The MAPFRE GIP, on the other hand, provides a score and ranking that sorts markets according to their potential contribution to closing the global insurance gap. The latter index is obtained by scaling the GAI score by the relative size of each market, making it a metric for each market that can be compared to global underwriting potential.

It is important to note that the components of the MAPFRE GIP can be expressed in absolute or relative terms, as spreads in the growth of certain explanatory variables relative to a theoretical benchmark. These factors, which can be positively or negatively related to the insurance gap, are applied to a sample of 96 insurance markets, approximately two-thirds of which are emerging countries and one-third are developed countries.

a) The benchmark

The benchmark, as used in the MAPFRE GIP[5] methodology, is a parameter that serves as a reference point in the analysis of the different insurance markets. The following are four key aspects about its importance and how it can be used:

1. *Reference point.* The benchmark is used as a common standard or point of reference to compare and evaluate the variables in each country. This is essential

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 of the benchmark. This measurement can be associated with a *"speed of convergence."*

to analyzing and understanding the differences in the level of insurance and the potential for developing insurance business around the world.

2. *Insurance Protection Gap Calculation.* The benchmark is essential in calculating the insurance gap, which represents the difference between the insurance coverage that would be optimal and beneficial to society and the actual insurance coverage purchased in a country. By comparing the actual penetration of a given insurance market against the benchmark, we can determine how much additional protection would be required in a country.

3. *Weighting of other parameters*. In addition to its role in calculating the insurance gap, the benchmark is also used to weight other parameters, such as per capita income and population. These parameters contribute to building the Gap Absorption Index (GAI) and the Global Insurance Potential Index (MAPFRE GIP) and help to assess each country's potential for developing its insurance business.

4. *Statistical approach.* The benchmark is determined statistically using the global insurance market values at the 90th percentile of the penetration distribution for the sample of the 96 countries analyzed. This ensures that the benchmark is an objective standard and is not arbitrarily selected.

It is important to note that the benchmark is not intended to portray the reference countries as examples to be followed in terms of the structure or specific characteristics of their insurance markets. It is only used as a statistical parameter for comparison and analysis. In summary, the benchmark is an essential tool in the MAPFRE GIP methodology to compare and evaluate variables related to the insurance activity for the Life and Non-Life segments in different countries. It is based on the values of the countries closest to optimal coverage, thereby helping to understand insurance gaps and the potential for development in the field of insurance worldwide.

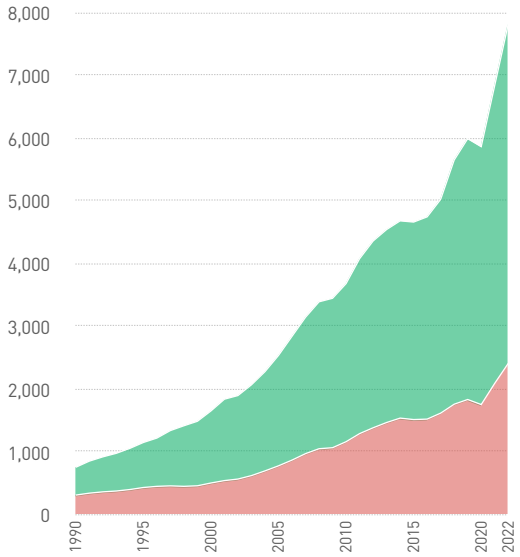
b) The Insurance Protection GAP

The Insurance Protection Gap (IPG) analysis provides important insight into the state of the insurance industry and its relationship to the global economy. As depicted in Chart 1.2-a, the overall IPG for the total market, which includes both Life and Non-Life insurance, stood at $7.813 trillion in 2022 ($6.838 trillion in the previous year). This represents a gap in insurance protection representing 777 basis points (bps) of global GDP (see Chart 1.2-b).[6] Of the total IPG, 69.1% is concentrated in the Life insurance segment, equivalent to $5.401 trillion. The remaining 30.9% corresponds to the Non-Life insurance segment, equivalent to $2.412 trillion (see Chart 1.2-c). In terms of overall GDP, these gaps amount to 239.8 bps for the Non-Life segment and 537.1 bps for Life.

It should be noted that, over time, there have been significant changes in global IPG composition. Compared to 1990 (the reference time parameter for this study), the IPG in the Life segment has gained a larger share of the total gap, increasing by 10.6 percentage points (pp). Accordingly, in 2022, the Life segment accounted for more than twice the Non-Life segment relative to GDP, with 537.1 bps (47.4 bps more than the previous year), while it increased by 23.7 bps in the Non-Life segment to reach 239.8 bps of GDP in 2022 (see Chart 1.2-c above).

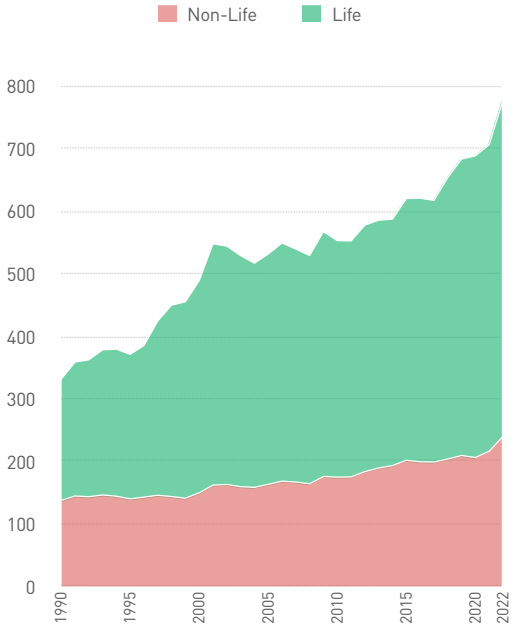
The growth of the IPG varies according to the insurance segment and the group of countries analyzed. Although, as a whole and in absolute terms, growth is evenly distributed between the Life and Non-Life segments. Accordingly, the IPG in the Life insurance segment grew by 13.9% in 2022, while in the Non-Life segment it grew by 15.2% (see Chart 1.2-d and Table 1). However, in relative terms (measured in bps of global GDP), the variation in the insurance gap in the Non-Life segment was half that observed in the Life segment. In the first case (Non-Life), the annual variation is

Chart 1.2-a
Absolute evolution of global IPG
by market segment
(billions of dollars)



Source: MAPFRE Economics

Chart 1.2-b
Relative evolution of global IPG
by market segment
(in basis points of global GDP)

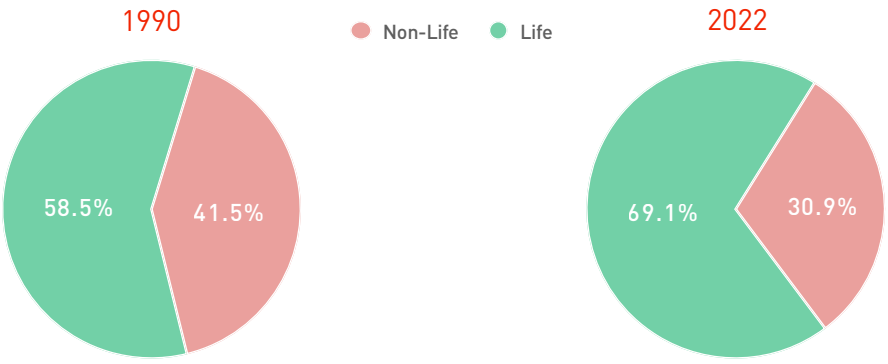


Source: MAPFRE Economics

mainly attributable to the increase seen in the BRICS[7] (+10.1 bps compared to the previous year and accounting for 45.5% of the IPG of this insurance segment), as well as to the increase in the rest of the emerging countries (which account for 42.7% of the IPG of this segment and have grown 9.5 bps over the previous year).

In the Life segment, the structure and composition of the insurance gap by region is more uniform. Despite this, the BRICS account for 36.0% of the IPG, the rest of the emerging markets 36.9%, and the total of the G7[8] and the rest of the developed markets account for the remaining 27.1%. However, the other emerging countries (+18.4 bps) and the BRICS (+13.8 bps) grew more compared

Chart 1.2-c
Structure of global IPG,
by market segment, 1990-2022
(%)



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 2022-2021 (%)	Change in GDP 2022-2021 (%)	Change in total IPG (%)	Change in IPG/GDP (bps)	Change in relative penetration index (%)**
Non-Life					
BRICS	2.0%	4.2%	14.3%	10.1	-1.4%
Other emerging markets	3.6%	7.7%	14.4%	9.5	0.4%
G7	5.2%	2.3%	14.9%	1.8	13.3%
Other developed markets	-4.7%	1.0%	35.5%	2.4	-2.7%
Global	**3.8%**	**3.8%**	**15.2%**	**23.7**	
Life					
BRICS	1.5%	4.2%	11.8%	13.8	-0.4%
Other emerging markets	-3.5%	7.7%	14.4%	18.4	-0.2%
G7	-4.0%	2.3%	14.0%	9.6	26.1%
Other developed markets	-10.2%	1.0%	21.9%	5.7	-3.8%
Global	**-4.3%**	**3.8%**	**13.9%**	**47.4**	

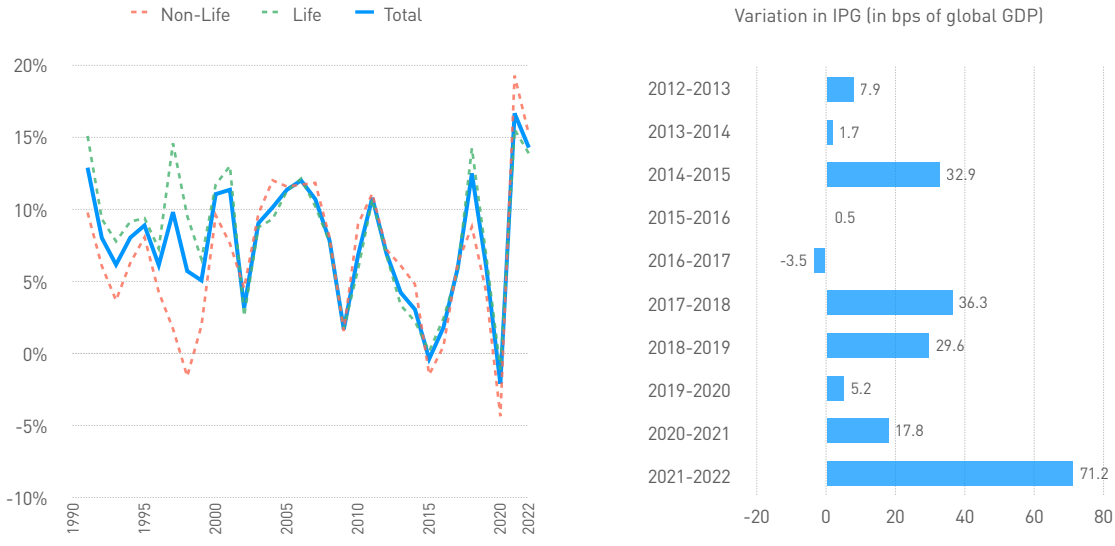
Source: MAPFRE Economics

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

to the previous year than the rest of the countries analyzed. Thus, when analyzing the IPG for both insurance segments (Non-Life and Life) as a whole, the emerging markets are predominant. Accordingly, 38.9% of the total IPG corresponds to the BRICS and 38.7% to the rest of the emerging economies, which together account for 77.6%.

Analyzing the dynamics of the insurance gap since 1990, there are several important conclusions to be drawn. The first is that the insurance gap in the Life segment has grown faster than in the Non-Life segment. When analyzed in absolute terms, the average annual growth rate of the Life segment over the 1990-2022 period was 8.1%, while in the

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

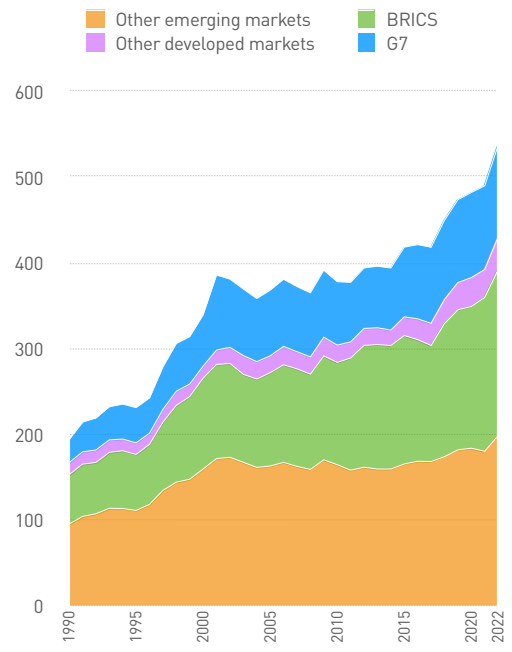


Source: MAPFRE Economics

Non-Life segment it was only 6.6%. Similarly, in relative terms, the insurance gap in the Life segment has increased by 343.2 bps between 1990 and 2022, while in the Non-Life segment the increase was only 102.5 bps of global GDP. Second, relative to the Life insurance segment, in relative terms (IPG as bps of GDP) and focusing on the regions, the BRICS and the rest of the emerging countries have grown the most between 1990 and 2022, with a variation of 135.6 bps and 103.4 bps, respectively (see Charts 1.2-e and 1.2-f). Something similar is observed in the Non-Life segment, with the BRICS growing by 63.3 bps of global GDP between 1990 and 2022, and the rest of the emerging countries growing by 29.8 bps. Third, when the IPG is expressed as a proportion of insurance business in the Life segment, the G7 and the other developed countries, with a larger premium volume, show more modest growth in this indicator (the IPG is 0.10 and 0.46 times the size of the insurance business in 1990). However, they are the only ones to have grown over the 32 years studied, reaching 0.67 and 1.40 times, respectively, in 2022. This contrasts with the BRICS (9.8 times) and the rest of the emerging countries (7.8 times), with higher indicators in 1990 (both with respect to the developed countries mentioned above and compared to the year 2022), which have fallen 6.3 times in BRICS and 1.4 times in the rest of the emerging countries to 3.6 times and 6.3 times, respectively. Finally, as shown in Charts 1.2-g and 1.2-h, over the 1990-2022 period, the structure of the IPG in both segments has also changed. On the one hand, regarding the Life insurance segment's IPG, the share of emerging markets (BRICS and other emerging economies) has decreased from 78.8% in 1990 to 72.9% in 2022. However, in the Non-Life segment, the trend has been the opposite, with this group of countries increasing its share from 86.2% to 88.2% during this period.

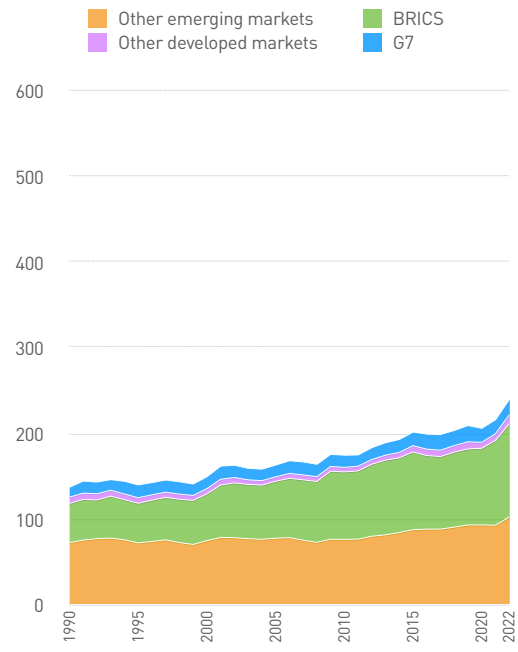
In the Non-Life insurance segment, the IPG grew by 15.2% in 2022 because, although Non-Life insurance premiums grew in line with global GDP, this growth should have been even higher to keep the IPG at values

Chart 1.2-e
Evolution of global IPG in the Life segment, by economic grouping
(in basis points of global GDP)



Source: MAPFRE Economics

Chart 1.2-f
Evolution of global IPG in the Non-Life segment, by economic grouping
(in basis points of global GDP)

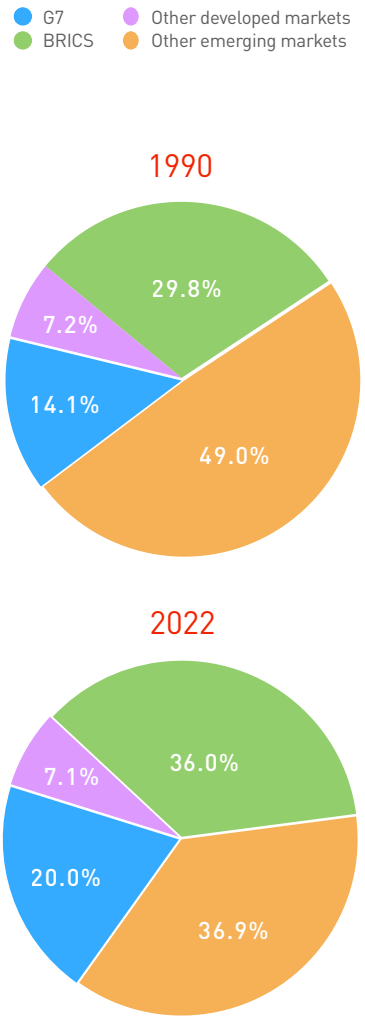


Source: MAPFRE Economics

similar to the previous year. In addition, for the Life segment, premiums decreased (-4.3%), indicating that the IPG recovery in 2022 was primarily driven by consumption and that the savings push was mitigated, which portends lower investment in the future. In 2022, the IPG in the Life segment represented between 3.6 and 6.3 times the size of the insurance business in the BRICS and the rest of the emerging markets, respectively. In the Non-Life segment, meanwhile, this ratio was 2.6 times for the BRICS and 3.4 times for the rest of the emerging markets (see Charts 1.2-i and 1.2-j).

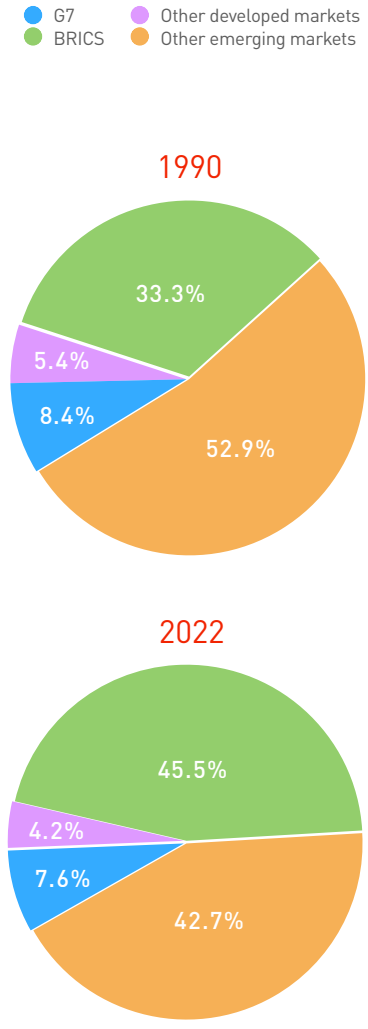
Last year it was forecast that the total IPG would grow at a slower rate in 2022 than in 2021, due to factors such as inflation and geopolitical uncertainty, which has proven to be the case (16.6% in 2021 versus 14.3% growth in 2022). These forecasts will be more conservative for the following year, since the transfer of price increases to insurance policies has a lag period and the penetration rate should therefore, in the best case scenario, remain at similar values. In addition, in 2023, generally weak GDP growth is expected,[9] with expectations of a continued global stagflationary environment with lower

Chart 1.2-g
Structure of global IPG in the Life segment, by economic grouping, 1990-2021
(%)



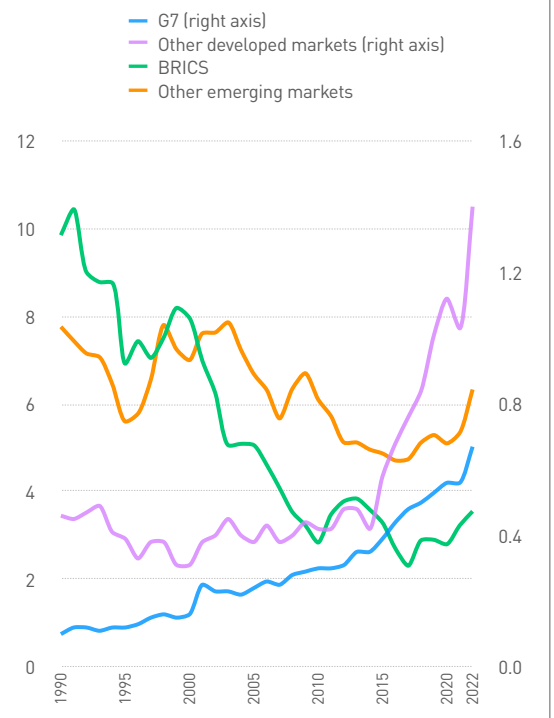
Source: MAPFRE Economics

Chart 1.2-h
Structure of global IPG in the Non-Life segment, by economic grouping, 1990-2021
(%)



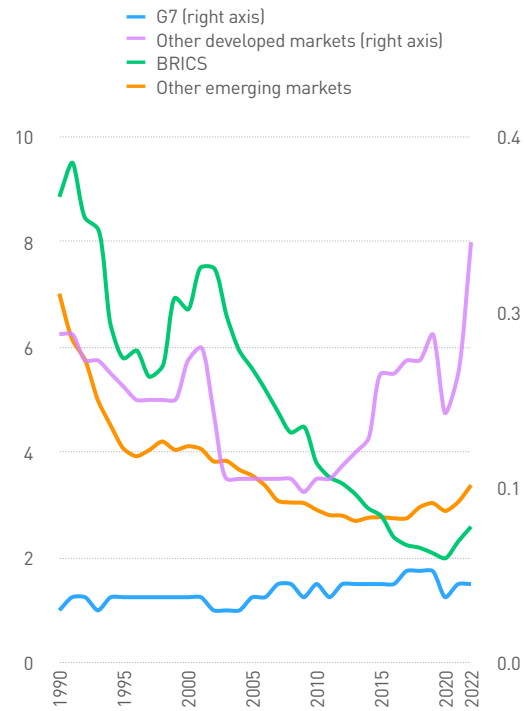
Source: MAPFRE Economics

Chart 1.2-i
IPG as a multiple of the Life market
(number of times the size of the actual insurance market)



Source: MAPFRE Economics

Chart 1.2-j
IPG as a multiple of the Non-Life market
(number of times the size of the actual insurance market)



Source: MAPFRE Economics

growth in insurance business' more cyclical lines.

c) Relative penetration

Relative penetration is a measurement that compares the penetration levels of the market in question to the selected benchmark. This indicator can have values above 100% if the penetration rate of that market exceeds the benchmark penetration rate or below 100% if the benchmark penetration rate is higher than the market penetration rate. Relative penetration varies significantly by region (developed and emerging markets[10]) and insurance market segment (Life and Non-Life). This analysis shows that values above 100% are reached only in the Non-Life segment and for the G7 group (108% in 2022 versus 110% in 2021). In the Non-Life insurance segment, the relative penetration of the BRICS fell -1.4 pp from the previous year to 41%, while in the rest of the developed markets and emerging markets it fell -3.7 pp and -3.5 pp to 68% and 44%, respectively. This is due, in part, to the significant growth in the benchmark penetration rate compared to the previous year and also in relation to the penetration rates of the groups of countries in question. It is important to note that all these relative penetration values are higher than those recorded in 1990, except for the G7, which experienced a drop of -4.6 pp from the 112% reached in 1990.

Meanwhile, in the Life insurance segment, all the markets analyzed are far from matching or exceeding the benchmark penetration. Accordingly, the relative penetration of the BRICS fell by -2.5 pp compared to the previous year to 56%, as well as in the G7 and the rest of the developed markets, with declines of -5.5 pp and -4.4 pp, down to 82% and 47%, respectively. Emerging markets are the only ones to show a 1 percentage point increase over the previous year. However, they still have the lowest relative penetration

rate (28%). In 2022, relative penetration has increased compared to 1990 in the BRICS (8.5 pp) and the rest of the emerging countries (14.6 pp), while it has decreased in the G7 (-24.8 pp) and the rest of the developed markets (-8.9 pp).

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

As in previous versions of this report, as it is a more structural causal phenomenon, in this MAPFRE GIP update 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 2022, global GDP per capita experienced 3% growth compared to the previous year. This reflects some exhaustion of the previous year's economic recovery following the recession seen in 2020. The contribution to this relative GDP per capita growth was higher in the BRICS, where the indicator grew by 9.4%, and in the rest of the emerging countries (7.9%), while the rest of the developed countries grew by 1.3% (below 3%). Additionally, the G7 country group saw its relative GDP per capita contract (-1.5%) compared to the previous year. As a result, the contribution to relative GDP per capita growth was negative in the G7 group ($720 less than the previous year).

The average GDP per capita of developed countries in 2022 represented around 104.2% of the GDP per capita of the benchmark used for the total market (109.3% in the previous year). This indicates that, on average, developed countries had a higher per capita income level than the benchmark. In contrast, the average for emerging countries was only 23.8% of the benchmark (23.1% in the previous year), meaning that, on average, emerging countries had significantly lower per capita income levels compared to the benchmark.

In developed countries, the ratio of GDP per capita to the benchmark has trended negatively, falling -5%, due to the aforementioned decline in G7 GDP (-1.5%) and also because the growth of the benchmark used as a reference has been higher than for developed countries as a whole. However, GDP per capita performance in emerging countries has been positive (+0.8%), based on a favorable trend (9.4% for BRICS and 7.9% for the rest of the emerging countries) and higher than the growth of the benchmark. Nevertheless, the gap between developed countries with higher average per capita income levels and emerging countries has remained during the period under analysis.

f) Population size

The global population is unevenly distributed between developed and emerging countries, with the latter having a significantly larger population on average, according to United Nations figures. In 2022, the global population, taking into account the 96 countries included in the analysis, reached 6.634 billion people,[11] which represents 83% of the world's population (7.951 billion). The global population is distributed among the BRICS (49%), which grew by 0.34% over the previous year to 3.248 billion, the G7 (12%), which grew by 0.28% to 775 million, the rest of the developed countries (3%), which account for 182 million and experienced growth of 0.64% and, finally, the rest of the emerging countries, which account for 37% of the global population and experienced the highest growth (0.84%), reaching 2.429 billion people. The benchmark population grew by 0.67% in 2022, compared to 0.72% in 2021, surpassed only by the growth of emerging countries (0.84%). The population of emerging countries as a whole grew by 31.3 million to 5.7 billion, which represents a 0.7% increase over the previous year, a growth figure similar to that of the previous year (0.6%).

The ratio between the population of developed and emerging countries continues to decline. Thus, the ratio of the population of developed countries represented approximately 16.9% of the population of the emerging countries considered in the sample

in 2022. This figure is lower than the 20.7% recorded in 1990 and 16.9% in 2021. This means that, on average, an emerging country had an average population size in 1990 of 55.1 million inhabitants, while a developed country had an average population size of 30.7 million people, compared to 81.1 and 36.8 million inhabitants, respectively, in 2022.

g) The population growth GAP

The population growth gap is calculated as the difference in potential population growth between the country in question and the benchmark. The emerging countries have a higher population growth than the developed countries, and also higher than the benchmark, although they are converging perennially. Under normal conditions, fertility and life expectancy are structural variables that do not change significantly from year to year. As a result, their impact on the population growth gap is quite small. Emerging countries experienced population growth of 0.6% in 2022, which is considerably higher than in developed countries, where population growth was 0.3%, and both are below the benchmark of 0.67%.

h) The GDP growth GAP

The world GDP growth gap, compared to the 2022 benchmark, showed an increase of 0.4 pp compared to the previous year, showing a global potential GDP growth over the benchmark potential growth of 2.81%. The other emerging countries are at this level (2.89%), as their GDP growth gap has increased by 1.03% compared to the previous year, while the BRICS, G7, and the rest of the developed countries have decreased. The BRICS, in particular, experienced the largest drop in their GDP growth gap in 2022 (-0.54%), mitigating the previous year's baseline effect and reaching a value of 2.97%. This represented a significant drop compared to the 3.5% recorded in 2021. Developed countries had a GDP growth gap close to 2.29%. These figures are well above the potential growth of the G7's GDP gap, which averaged 0.65%, approaching the potential growth of the benchmark.

The above data suggests that emerging markets, especially large ones such as the BRICS, are experiencing faster growth in their GDP growth gap compared to developed countries. This may lead to emerging insurance markets playing an increasingly important role in the MAPFRE GIP ranking, both in the Life and Non-Life segments, as they have the capacity to catch up in terms of income and are still facing high levels of underinsurance. As will be shown in the section on the GAI components, in the Life insurance segment the GDP growth gap accounted for more than 73% in 2017 for the G7 and the rest of the developed countries, and in 2022 it will barely reach 65% (representing a drop of more than 8 pp in this period). However, for the BRICS group and the rest of the emerging countries, while the weight of the GDP growth gap is lower than for the above countries (50.8% and 53.6%, respectively), the drop has been smaller (approximately 4 pp), producing a convergence effect. This convergence phenomenon is also present in the analysis of the Non-Life segment.

1.3 Scores, rankings, and levels

The MAPFRE GIP report uses the GAI (Gap Absorption Index) and its rescaling as part of the Global Insurance Potential Index (MAPFRE GIP) to categorize and rank countries by their insurance potential. It is important to note that the data used for the report are based on information updated as of 2022, and corrections and updates have been made with respect to previous reports to ensure the accuracy and relevance of the classification.[12]

The MAPFRE GIP ranking identifies two categories or lists of markets with high insurance potential. The first of these (Tier-2) includes insurance markets that rank above the 75th percentile in terms of their insurance potential. Together, these countries account for 84.1% of the overall insurance potential. This means that they are countries with a significant economic size and considerable capacity to close the insurance gap. These countries are considered part of the "watch list" due to

their importance in the global insurance context. The next level (Tier-1) is a more restrictive category and consists of those countries with insurance potential above the 95th percentile. Together, these countries account for 56.9% of the overall insurance potential. These countries have the greatest insurance potential and are considered leaders in the ability to close the insurance gap.

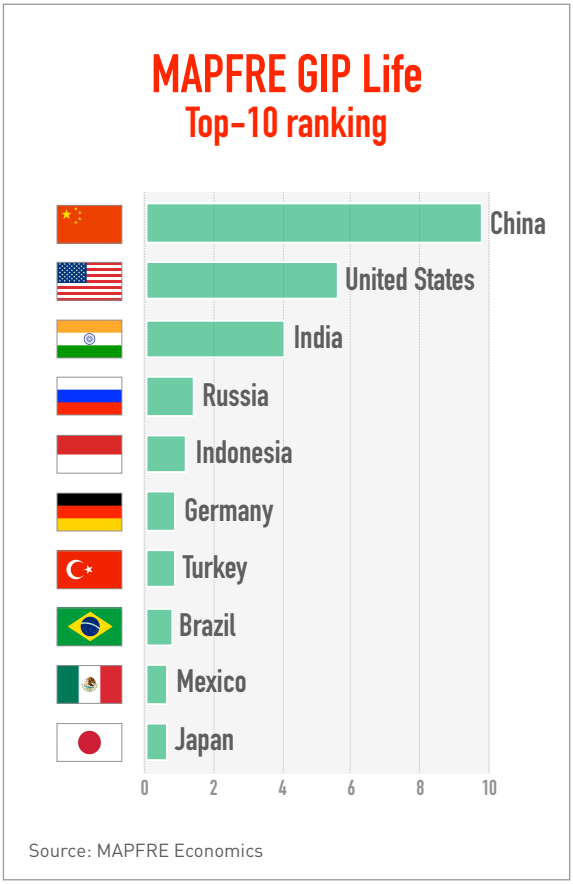
The MAPFRE GIP ranking is based on these two levels and is used to identify and rank countries by their potential contribution to closing the global insurance gap. Taking these levels into account allows for a better understanding of these countries' insurance markets and their ability to close the insurance gap in the global context.

2. Life ranking

2.1 A look at the Top 10

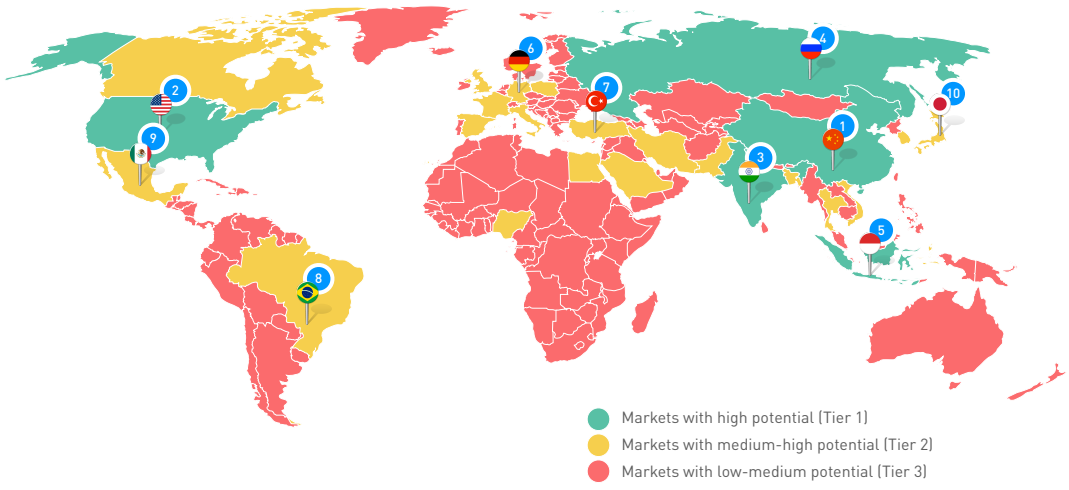
The MAPFRE GIP ranking of the Life segment provides an overview of the ten largest markets according to their insurance potential as measured by this indicator. The relative positions compared to 2021[13] show few changes and do not shift until the eighth and ninth positions, which are held by Brazil and Mexico, respectively, ahead of Japan, which dropped two positions to close out the top ten.

Extending the time frame to the last decade, we find that the top five countries are still the leaders in the Life segment. However, Germany (sixth) and Turkey (seventh) have moved up three and seven positions, respectively, which is closely linked to both countries' demographic development, while Brazil and Japan dropped two places to eighth and tenth positions (see Table 2.1-a). Accordingly, the Tier-1 countries are, in order according to their MAPFRE GIP score, China, the United States, India, Russia, and



Source: MAPFRE Economics

Chart 2.1-a
Life segment: MAPFRE GIP 2023 ranking and geography



Source: MAPFRE Economics

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

Country	MAPFRE GIP	Ranking			GAI	Years to close 2022 IPG
		2022	Δ 2022-2021*	Δ 2022-2012*		
Tier 1						
China	9.79	1	0	0	53.00	13
United States	5.63	2	0	0	36.28	9
India	4.10	3	0	0	56.75	12
Russia	1.45	4	0	0	44.77	30
Indonesia	1.23	5	0	0	50.20	33
Tier 2						
Germany	0.93	6	0	3	28.89	9
Turkey	0.90	7	0	7	46.39	63
Brazil	0.79	8	1	-2	34.00	10
Mexico	0.68	9	1	1	40.73	19
Japan	0.67	10	-2	-2	19.23	0
Saudi Arabia	0.65	11	1	-4	49.40	43
Egypt	0.64	12	2	-1	63.01	43
United Kingdom	0.56	13	0	13	25.25	0
France	0.53	14	-3	2	23.25	2
Pakistan	0.53	15	0	-2	57.63	60
Iran	0.50	16	0	-4	51.36	35
Canada	0.44	17	3	5	32.00	7
Bangladesh	0.41	18	4	2	53.45	64
Nigeria	0.40	19	4	-4	51.84	19
Poland	0.40	20	-2	12	40.17	45
Spain	0.40	21	0	4	29.86	11
Italy	0.39	22	-5	-3	21.05	1
Vietnam	0.39	23	1	-2	47.99	10
South Korea	0.36	24	-5	4	22.82	37

Source: MAPFRE Economics

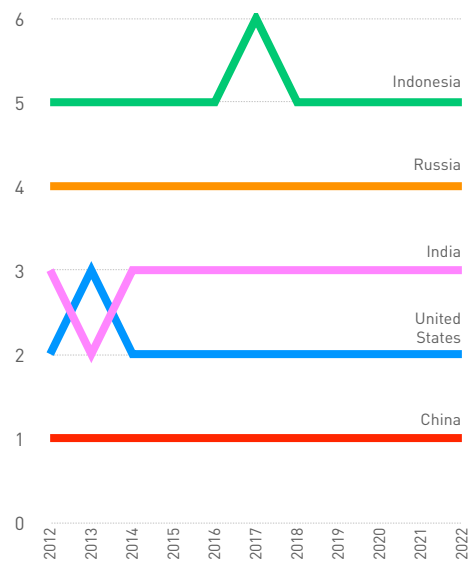
Tier 1: A sub-group of Tier 2, containing countries with MAPFRE GIP scores in the 95+ percentile.
Tier 2: Countries with a MAPFRE GIP score that places them in the highest quartile of the ranking.

* Variation in the 2022 ranking compared to previous years may differ from the contents published in previous versions of this report, because of recalculations performed in 2022 using updated information for previous years for some of the variables included in the estimation.

Indonesia, while this year's top five Tier-2 countries are Germany, Turkey, Brazil, Mexico, and Japan. However, as can be seen in Chart 2.1-b, this top five ranking has not remained static over the last decade and, with the exception of China and Russia, which have been in the same position, it can be seen how the United States and India have competed for second and third place throughout the period.

In general, there has been modest growth in these markets' insurance potential, which is due in part to the increase in the insurance gap, whose share in the GAI has grown from 15.5% to 19.5% (see the trend in the GAI components for Tier-1 in Chart 2.4-d), and also to economic growth. The ranking shows that, of the top ten markets, only Russia and Japan maintain practically the same MAPFRE GIP figures as in the previous year. Nevertheless, all of them have increased their insurance potential in terms of absorption or capacity to close the global IPG in the Life segment (GAI). The complete list of GAI and MAPFRE GIP values for the markets analyzed in the Life segment is found in the Appendix to this report in Table A-1.

Chart 2.1-b
Evolution of Tier-1 ranking
in MAPFRE GIP Life
(positions in the ranking every year)



Source: MAPFRE Economics

Generally, the increase seen in GAI and MAPFRE GIP values in the Life insurance segment is due to growth in the insurance gap, as shown in the first section of this report. This serves as a starting point for the GAI calculation and, therefore, the MAPFRE GIP. The report also highlights that, in 2022, the concentration of insurance potential remained at 84.1% in the Tier-2 markets, indicating these countries' importance in the global insurance context (see Table 2.1-b). However, the Tier-1 markets, which also have significant potential to close the insurance gap, have declined in concentration slightly (56.9%).

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

Variable	MAPFRE GIP Life		
	2022	2021	2012
Maximum annual rise	15	8	5
Maximum annual fall	-12	-5	-9
Threshold to Tier 2	0.34	0.28	0.22
Concentration up to Tier 2	84.1%	84.1%	83.6%
Threshold to Tier 1	1.01	0.90	0.94
Concentration up to Tier 1	56.9%	57.1%	55.9%

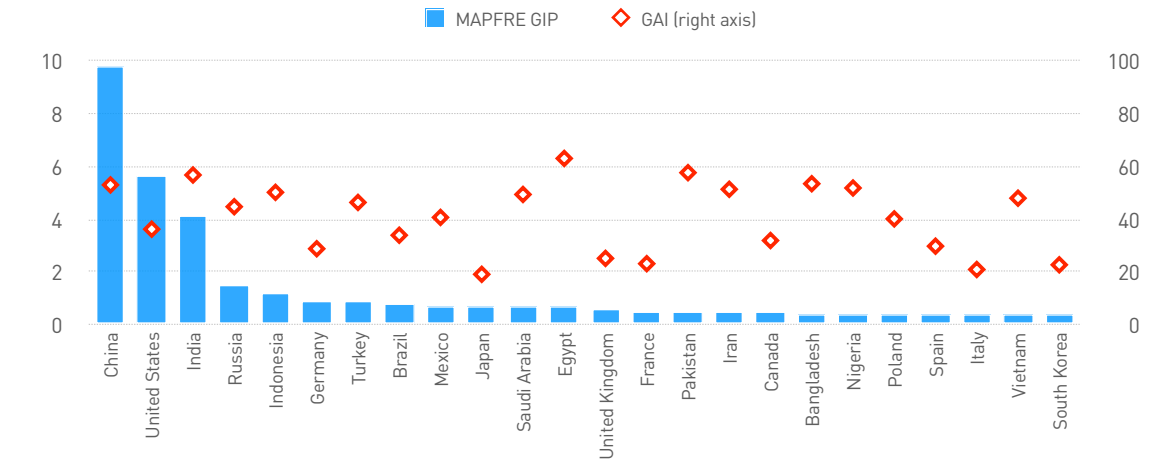
Source: MAPFRE Economics

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. As a result, 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-c). In addition, growth in insurance potential is influenced by growth in the potential GDP gap compared to the benchmark. This means that, even in countries with a relatively low penetration rate, the insurance potential can increase if there is significant economic growth and an insurance gap to close.

The IPG in the Life segment grew by 13.9% in 2022, thanks to the overall GDP growth (3.8%) and to the fact that premiums in the segment performed unfavorably (-4.3% worldwide), which led to a widening of the gap due to a shortfall in the potential growth of the penetration rate with respect to the benchmark. It bears noting that all the Tier-1 markets grew economically with respect to the previous year, and some, such as Russia (an exceptional case where the harsh sanctions applied following the start of the war in Ukraine do not seem to have had the expected effect), grew above the benchmark. However, trends in the premium market have been different; Russia (13.2%), India (7%) and the United States (9.2%) grew, while Indonesia (-12.6%) and China (-0.3%) contracted, which explains why they are the main contributors to IPG growth in relation to GDP and why their relative penetration rate in the Life market fell.

The most relevant changes can be seen at the end of the table comprising Tier-2 of the

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



Source: MAPFRE Economics

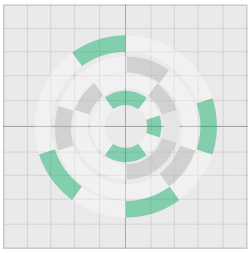
MAPFRE GIP Life ranking: France fell 3 places, Italy and South Korea, to cite the most significant declines, fell 5 places each, the latter closing out Tier-2, while Canada (17th) rose 3 places, and Bangladesh and Nigeria climbed 4 places to 18th and 19th, respectively. For the G7 countries, in France and Italy, despite increasing their insurance potential as measured by the GAI in the Life business, their respective GDP growth was insufficient to exceed the target GDP growth. As a result, the MAPFRE GIP (which is weighted by overall GDP) remained at figures similar to the previous year, while the rest of the countries saw an increase in the latter indicator and, consequently, fell in the ranking. An example of this is Canada, which grew in both GAI and MAPFRE GIP because its GDP growth outpaced global GDP growth. It should be mentioned that in this group of countries, the GDP gap accounts for 64.8% of the GAI value and is more important than the relative penetration index, while the initial IPG accounts for 7.4% of the GAI. Bangladesh and Nigeria, which are part of the rest of the emerging markets, have a different explanation to the G7, due to a lower penetration rate relative to the benchmark, which entails a significant increase in the IPG, which is a component of the GAI with considerable weight in this type of country, accounting for 33.3% of the GAI.

2.2 Other promising markets

In this section, we analyze insurance markets that could have potential in the long-term to compete for a place in the MAPFRE GIP's Top-10 in the Life segment. In this case, the analysis is based on the GAI (Gap Absorption Index) and focuses on the 10 countries with the highest capacity to close the local gap, provided they are in Tier-2. These markets have the potential to move into the Top 10 in the future and are therefore worthy of attention.

Egypt tops the list of countries on the radar in the Life segment in 2022, indicating its potential to close the insurance gap, with a

Life segment: On the radar



- Egypt
- Pakistan
- Bangladesh
- Nigeria

In the Life segment, these 4 markets could stand out during the next decade due to their ability to absorb the insurance gap.

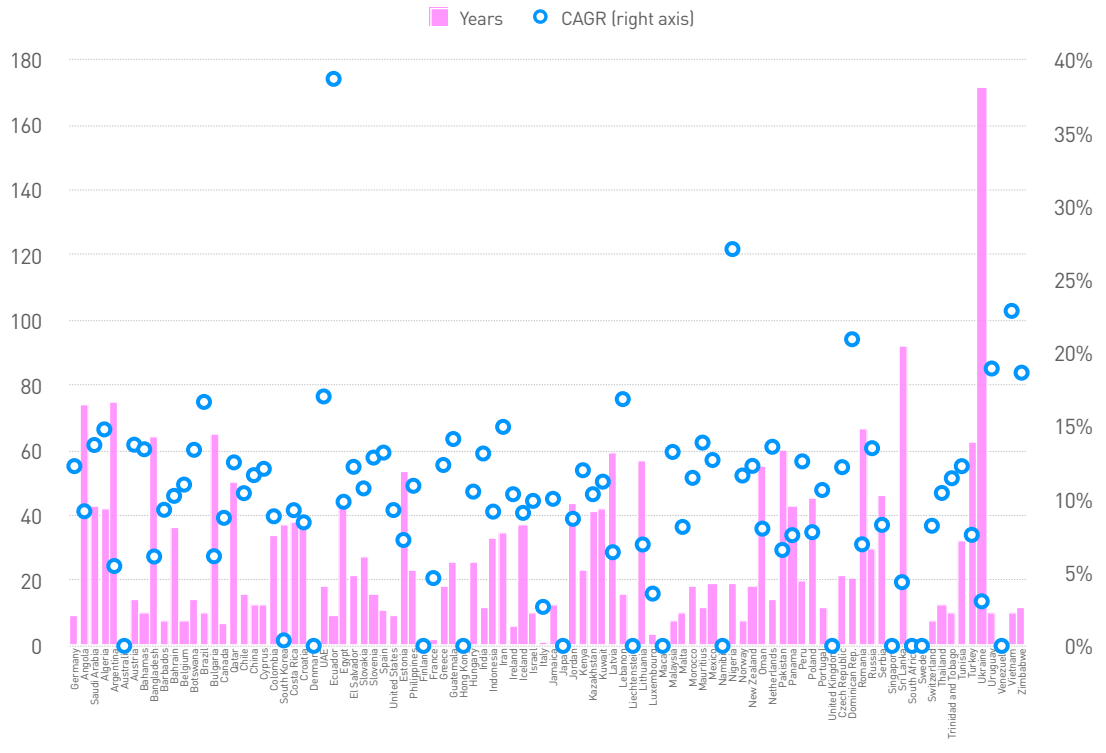
GAI of 63.0 points. Pakistan is close behind, with a high potential to improve its ranking position with a GAI of 57.6. Bangladesh (53.4) and Nigeria (51.8) are also on the list, showing significant potential in the Life segment.

These countries are located in the middle of the MAPFRE GIP Tier-2, suggesting that they have the capacity to improve their insurance potential in the Life segment and compete with emerging markets with lower GAI scores. Given their potential, it is important to pay attention to these markets in the coming years, as they could play a significant role in closing the insurance gap in the Life segment as they continue to develop economically and strengthen their insurance industries.

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

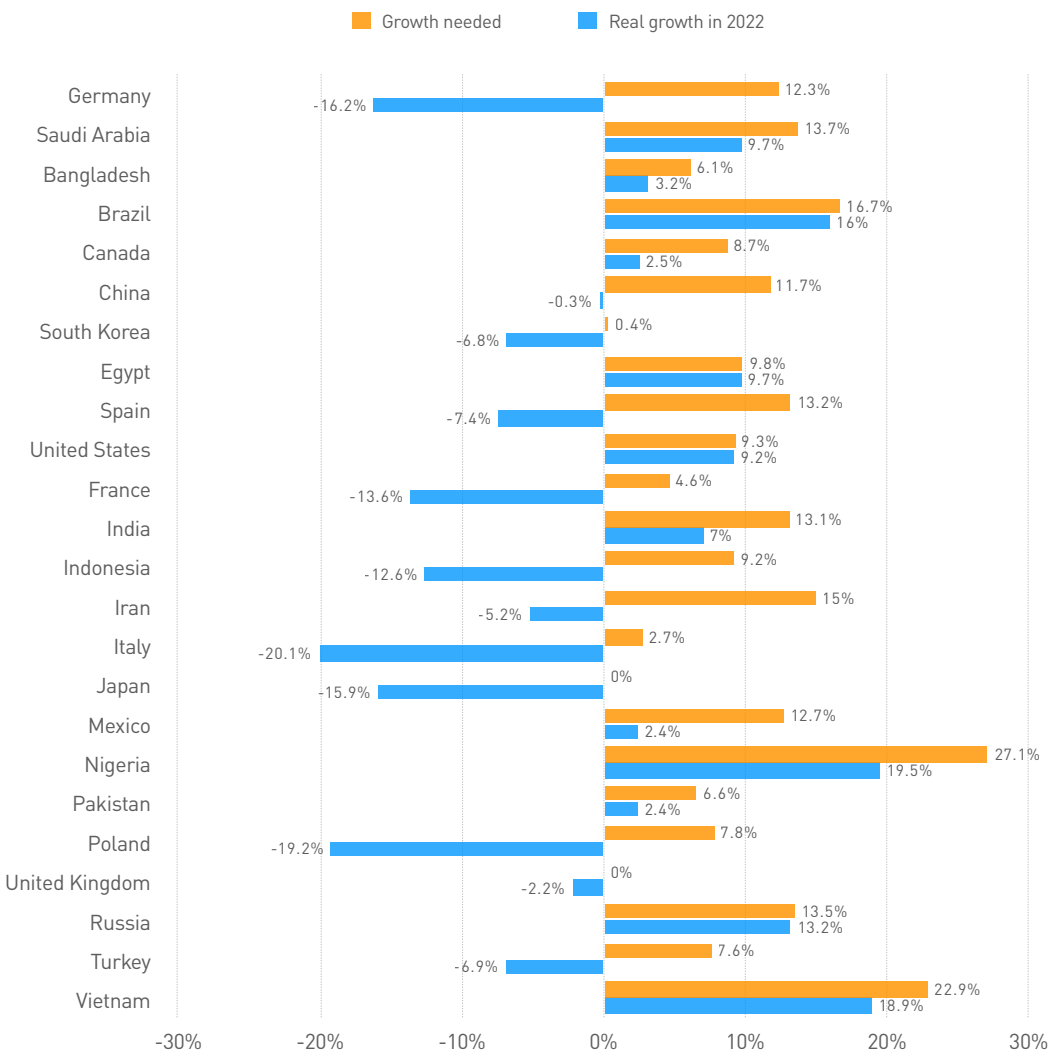
The estimated time to close the domestic insurance gap in the Life segment (convergence with the benchmark) in 2022 varies according to the category of insurance markets. In developed markets, it is estimated that it would take eight years to close the insurance gap in this segment, based on the insurance potential calculated using the MAPFRE GIP, which is almost one year longer than the previous year. To cite some examples of the most important developed countries, the United States would need 9 years to close the gap, while in Japan and the United Kingdom there is no potential gap because the relative penetration rate compared to the benchmark is higher.

Chart 2.3-a
Life: years and annual growth needed to close the IPG



Source: MAPFRE Economics

Chart 2.3-b
Life: actual premium growth in 2022 vs. growth needed to close the IPG for Tier-1 and Tier-2



Source: MAPFRE Economics

For emerging countries, there is an increase in the time needed to close the gap compared to the previous year. Moreover, the time needed to close the gap (30 years) compared to developed countries is four times longer than the number of years it would take for actual premiums to equal potential premiums. For the rest of the emerging markets, the time needed to close the gap has grown, mainly driven by Middle Eastern and emerging European countries, with Turkey and Egypt being the clearest cases in point. Contrary to the BRICS, emerging countries' IPG growth has been higher in 2022 (14.4%) than the IPG growth in 2021 (which was 11.5%), which increases the number of years to close the gap and which is, in turn, a consequence of the trend in premiums and GDP compared relatively to the benchmark over the course of this last year (see Chart 2.3-a).

Broken down by geographic area, it can be seen that the time for the BRICS to close the insurance gap has decreased by nine years and is now estimated at 13 years, mainly due

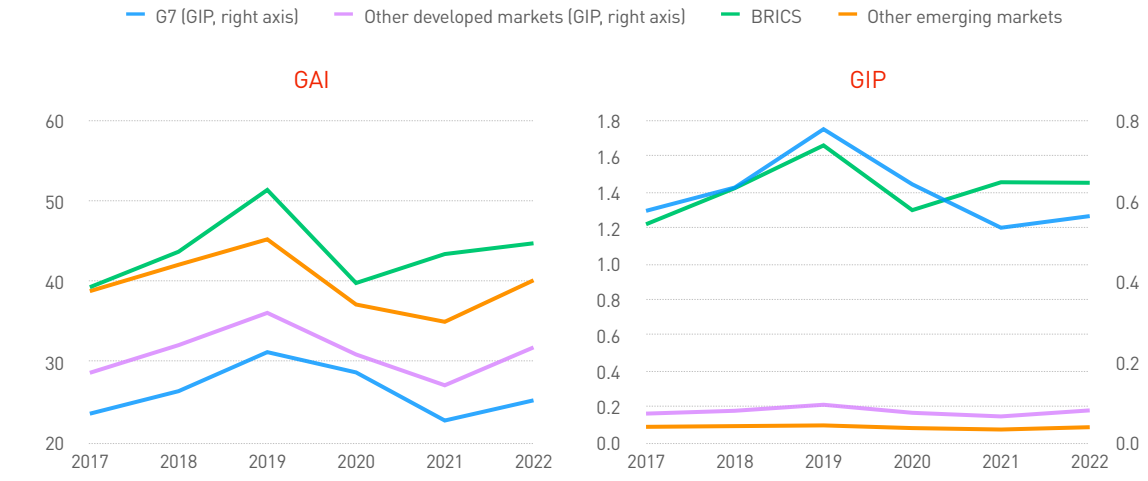
to lower IPG growth in China and Brazil compared to the previous year. In the case of Brazil, this was due to improved Life insurance premium volume (16%) and, in the case of China, it was because GDP growth was only 0.8%, which represents a narrower base to apply the penetration index relative to the benchmark. The IPG growth for the Life segment for the BRICS was 23.4% in 2021, and growth for 2022 was lower (11.8%). Chart 2.3-b shows, for Tier-1 and Tier-2, the cumulative annual growth required for these countries in premium volume to close the insurance gap compared to the change in premiums in the last year. For countries with zero cumulative annual growth, this means that there is no gap in premium volume. This information highlights the economic and insurance dynamics in different regions and shows how factors such as premium growth, nominal GDP, and IPG variation can influence the time required to close the insurance gap in the Life segment in each insurance market.

2.4 Overview of insurance potential and its components in the Life segment

This section analyzes a retrospective view of the insurance potential in the Life insurance segment over the last 5 years (since the first GIP-MAPFRE report[14]) and how it has developed in different economic regions and country categories. 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. Accordingly, insurance potential, as measured by the MAPFRE GIP and GAI indices, has trended upward from 2017 to 2019, with a decline in 2020 owing to the impact of the COVID-19 pandemic. It has subsequently shown an upward trend, albeit unevenly depending on the areas and tiers analyzed.

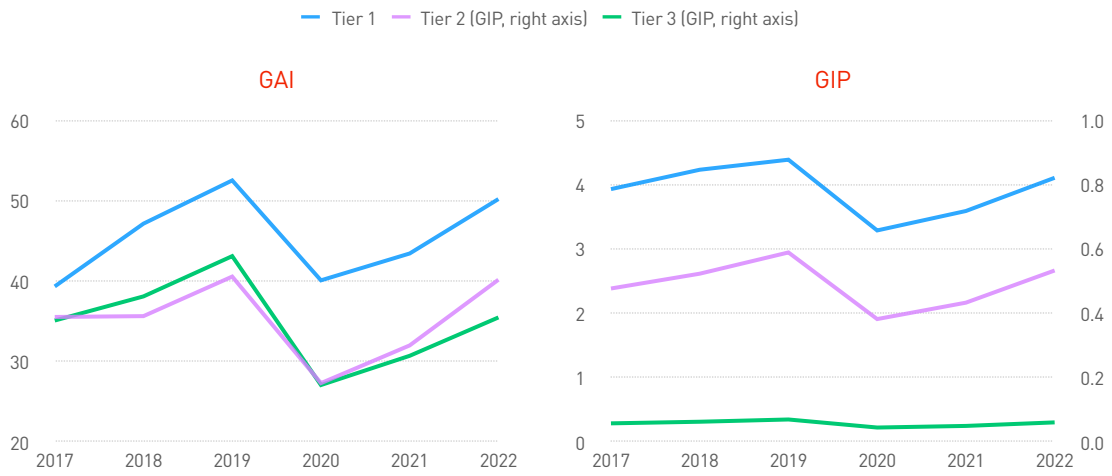
The BRICS countries have experienced modest growth in the GAI, with a rise in the median from 43.4 in 2021 to 44.8 points in 2022. This is mainly due to the fact that both Russia and South Africa stagnated with respect to the previous year and maintained similar values in the index. The trends of the MAPFRE GIP also show that the BRICS group is the only one with a more muted performance as a result of slower growth in the Russian IPG. Other countries have shown significant growth in the GAI, which is moderated when presented in the form of the MAPFRE GIP index due to the comparative and relative nature of this indicator with respect to GDP.

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



Source: MAPFRE Economics

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



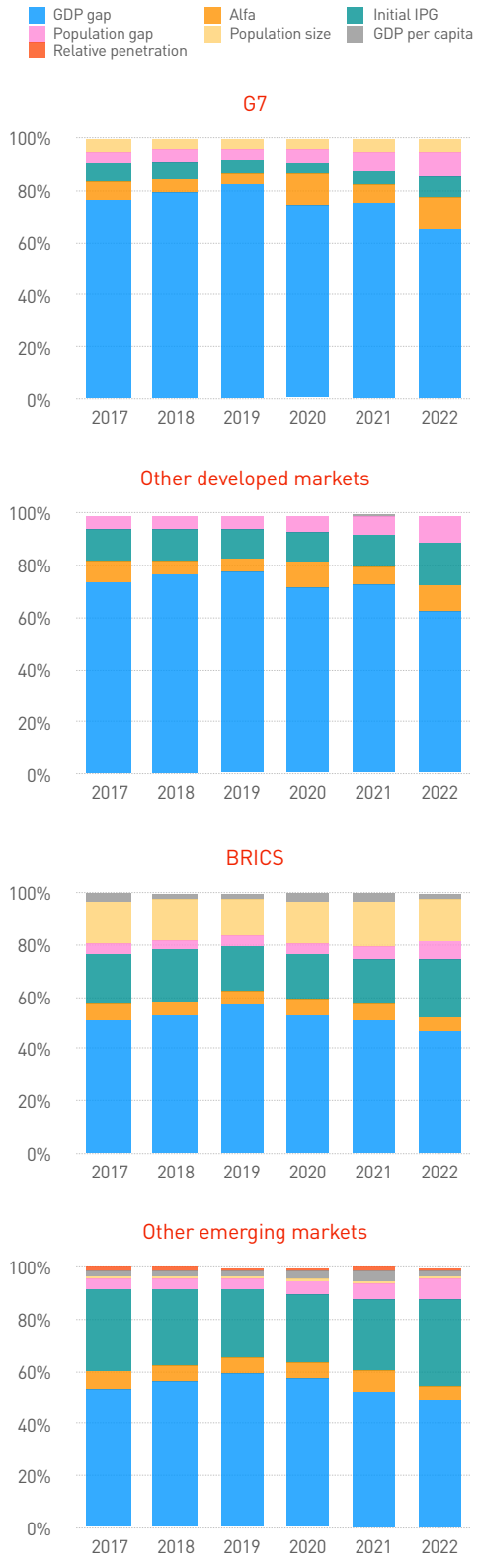
Source: MAPFRE Economics

However, analyzed by the groups of countries that make up the ranking for the Life segment, the markets grouped in Tier-1 are those with the best performance and the highest IPG and results in the MAPFRE GIP and GAI in 2022. This is not surprising, as three of the five Tier-1 countries are China (1), India (3), and Russia (4), which are also part of the BRICS.

Chart 2.4-c shows that the main component behind the GAI performance in all economic regions is the GDP growth gap. In 2022, this component accounted for 64.8% of the GAI value for the G7 group (75.7% in 2021), while in the other developed countries it accounted for 62.3% (72.5% in 2021), 46.5% in BRICS (50.8% in the previous year), and 48.8% in the other emerging countries (52.3% in 2021). It is worth noting, however, that in all of these groups this factor has been losing weight in favor of other factors that explain the GAI. When analyzed by tiers, this loss of weight of the GDP growth gap factor is also observed, although in no case does it exceed 54% of the GAI composition (see Chart 2.4-d).

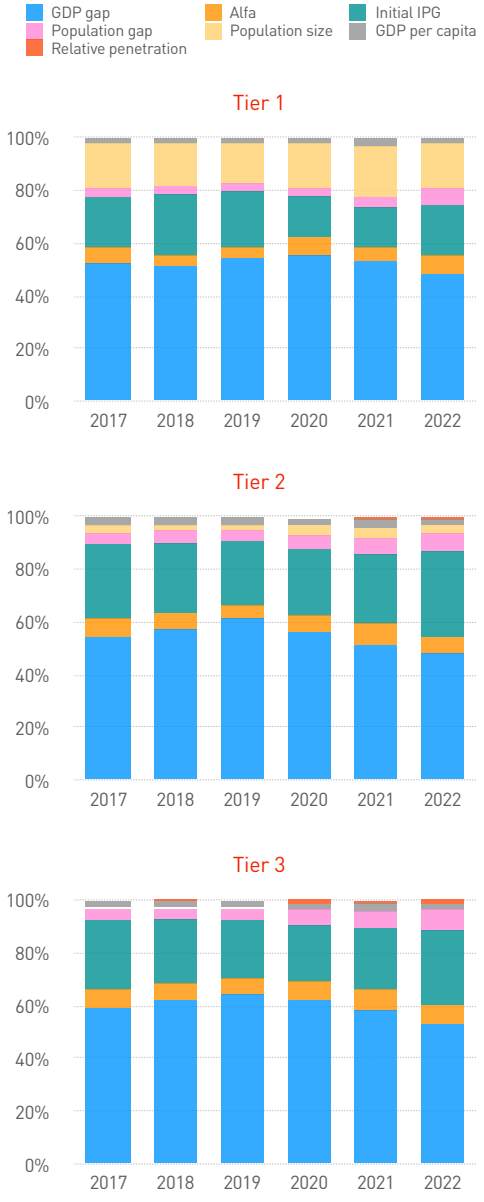
In summary, this information reflects how different factors, including GDP growth, demand elasticity, and the IPG growth gap have influenced the insurance potential in the Life insurance segment in various regions and country categories in recent years. The BRICS and other emerging markets show the greatest insurance potential and have experienced growth and recovery in GAI after the downturn caused by the pandemic. The G7 countries and other developed markets have also increased their insurance potential but have not reached pre-pandemic levels. This recovery is more pronounced in Tier-1 than in Tier-2 and Tier-3.

Chart 2.4-c
Life segment: evolution of GAI components, by economic grouping (%)



Source: MAPFRE Economics

Chart 2.4-d
Life segment: evolution of GAI components, by tier (%)



Source: MAPFRE Economics

3. Non-Life ranking

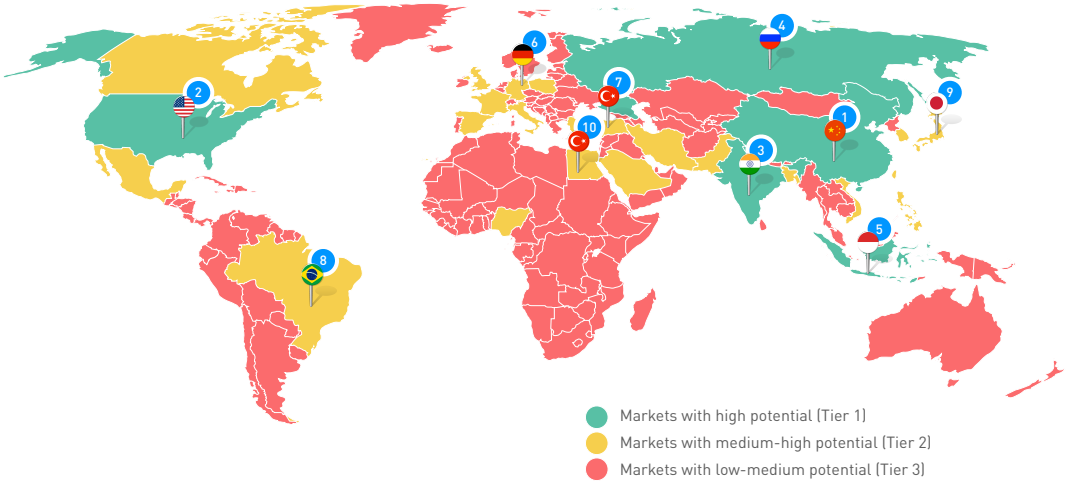
3.1 A look at the Top 10

This section provides a view of the Top-10 markets in the Non-Life insurance segment according to their insurance potential as measured by the MAPFRE GIP. As can be seen in the information presented in Table 3.1-a and Chart 3.1-a, the top five positions in the Non-Life segment ranking are China, the United States, India, Russia and Indonesia, all located in Tier-1.[15]

Compared to the previous year, it should be noted that the United States has traded second place with India, which, in 2022, was in third; there were no changes in the relative positions of the other Tier-1 members. As for the rest of the Tier-2 countries, Turkey (7th in the ranking), and Saudi Arabia (15th) moved up two places, while Egypt climbed three places to reach 10th. On the other hand, Japan (9th), France (12th), and Bangladesh (18th), to cite the most striking cases, dropped two places. In general, insurance potential grew in the Non-Life segment, with

Source: MAPFRE Economics

Chart 3.1-a
Non-Life segment: MAPFRE GIP 2020 geography and ranking



Source: MAPFRE Economics

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

Country	MAPFRE GIP	Ranking			GAI	Years to close 2022 IPG
		2022	Δ 2022-2021*	Δ 2022-2012*		
Tier 1						
China	9.51	1	0	0	51.47	11
United States	4.74	2	1	1	30.53	0
India	4.57	3	-1	-1	63.20	22
Russia	1.54	4	0	1	47.51	28
Indonesia	1.26	5	0	-1	51.06	19
Tier 2						
Germany	0.85	6	0	7	26.23	1
Turkey	0.81	7	2	7	41.59	8
Brazil	0.72	8	0	-2	30.88	4
Japan	0.67	9	-2	-2	19.37	13
Egypt	0.66	10	3	0	64.69	33
Mexico	0.63	11	0	-2	37.62	13
France	0.60	12	-2	3	26.18	5
Pakistan	0.56	13	-1	-1	60.90	43
United Kingdom	0.55	14	0	16	24.59	6
Saudi Arabia	0.54	15	2	-7	40.87	6
Italy	0.52	16	-1	1	28.01	9
Iran	0.49	17	1	-6	50.54	26
Bangladesh	0.49	18	-2	0	62.89	73
Nigeria	0.43	19	0	-3	55.07	61
Vietnam	0.40	20	1	0	50.20	16
Spain	0.37	21	1	6	27.57	5
Poland	0.36	22	1	4	36.39	10
Canada	0.35	23	1	8	24.94	0
Philippines	0.34	24	1	-3	47.76	28

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 2022 ranking compared to previous years may differ from the contents published in previous versions of this report, because of recalculations performed in 2022 using updated information for previous years for some of the variables included in the estimation.

the exception of Japan—whose insurance business potential decreased slightly by -1.6 and -0.09 in the GAI and MAPFRE GIP values, respectively—Brazil, and some European countries (Germany, France, and Italy). The complete list of GAI and MAPFRE GIP values for the markets analyzed in the Non-Life segment is found in the Appendix to this report in Table A-2.

The increase in the GAI and MAPFRE GIP values for the Non-Life segment is due to growth in the insurance gap (IPG), due to the increase in the initial gap of the IPG in all regions compared to the previous year, as will be further explained in the breakdown of the factors behind these indicators (see Chart 3.4-c). As can be deduced from Table 3.1-a, although Non-Life premium growth has been in line with GDP growth, the year-on-year change in total IPG (15.2% worldwide) is attributable more to the fall in the relative penetration rate relative to the benchmark and its greater distance from the benchmark than to other factors. This can be explained by the -1.4% drop in the BRICS (the

deepening index only grew in Brazil) and -3.7% in the rest of the developed markets in the relative penetration index for 2022.

It is worth noting that in Tier-1, all its members grew economically with respect to the previous year and some were above the benchmark, such as Russia, where, as mentioned above, the sanctions applied as a result of the start of the war against Ukraine do not seem to have had the expected effect. However, the trend in the premium market has been different. Although all Tier-1 countries grew, except Russia (-19.6%), only Indonesia (15.3%) grew more than GDP growth (11.2%), which explains why its contribution to IPG growth relative to GDP has declined. However, the case of the United States is striking as it has grown the most with respect to the previous year in terms of insurance potential, both in the GAI (+2.7%) and in the MAPFRE GIP (+0.4%), mainly as a result of the favorable trend of the greater potential to close the GDP gap with respect to the others and not due to the reduction in its deepening index, as it far exceeds the target set by the benchmark.

The concentration of insurance potential in Tier-1 continues to be significant in the Non-Life insurance segment (see Table 3.1-b). Tier-1 accounts for around 57.2% of Non-Life insurance potential (1 pp less than the previous year), while the next five countries account for around 9.8% of the potential (12% in 2021). There has also been a continued decline in the concentration of the top 24 countries from 85.1% in 2012 to 84.6% in 2022.

Extending the time frame to the last decade, it can be seen that China continues to lead the Non-Life segment, while the United States (2) and Russia (4) overtake India (3) and Indonesia (5). It should be noted that Germany (6th) and Turkey (7th) have each climbed seven positions and the United Kingdom and Canada climbed 16 and 8 places respectively. However, as can be seen in Chart 3.1-b, this top five ranking has not remained static over the last decade and, with the exception of China, which has held the same position over the last decade, it can be seen how the United States and India have contested the second and third positions during this period, while Russia and Indonesia have held the fourth and fifth positions.

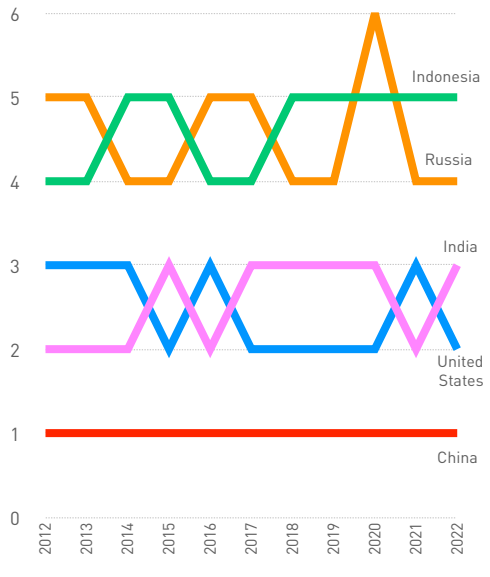
Table 3.1-b
Non-Life segment: Concentration in the MAPFRE GIP ranking

Variable	MAPFRE GIP Non-Life segment		
	2022	2021	2012
Maximum annual rise	12	5	6
Maximum annual fall	-11	-7	-5
Threshold to Tier 2	0.33	0.29	0.18
Concentration up to Tier 2	84.6%	84.8%	85.1%
Threshold to Tier 1	0.95	0.89	0.89
Concentration up to Tier 1	57.2%	58.2%	57.4%

Source: MAPFRE Economics

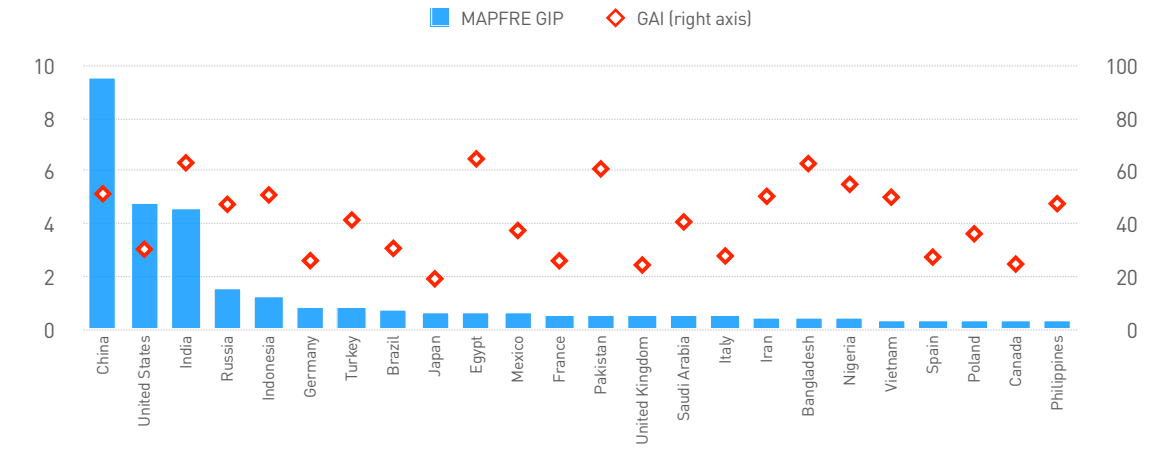
The Tier-1 and Tier-2 lists for the Non-Life insurance segment, and more specifically the

Chart 3.1-b
Evolution of Tier-1 ranking in the MAPFRE GIP Non-Life
(positions in the ranking every year)



Source: MAPFRE Economics

Chart 3.1-c
Non-Life segment: MAPFRE GIP vs. GAI (Tiers 1 and 2)



Source: MAPFRE Economics

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. In this regard, 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 3.1-c). In addition, growth in insurance potential is influenced by growth in the potential GDP gap compared to the benchmark. This means that even in countries with a relatively high penetration rate, such as the United States, the insurance potential can increase if there is significant economic growth and an insurance gap to close. These shifts indicate significant changes in the ability of insurance markets to close the gap in the Non-Life segment over the last decade, with some countries experiencing strong growth in their insurance potential, while others have lost ground in the ranking.

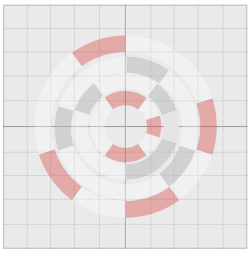
3.2 Other promising markets

In the Non-Life insurance segment, as in last year's report, there are several promising markets that, despite not being in the MAPFRE GIP Top-10, have a high insurance potential and relevant size, which makes them markets to follow closely. These markets include Egypt (GAI of 64.7 points), with a high potential to reduce the insurance gap (the initial IPG accounts for 36.4% of the GAI and the GDP gap accounts for 46.4%) and a significant size that could allow it to move up in the MAPFRE GIP ranking in the future. Also of note are Bangladesh (with a GAI of 62.9 points), Pakistan (60.9), Nigeria (55.1), and Iran (50.5). These emerging markets represent attractive opportunities for the growth of the insurance industry in the Non-Life segment and could compete with other markets in the future.

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

The time required to close the estimated insurance gap in the Non-Life segment has

Non-Life: On the radar



- Egypt
- Bangladesh
- Pakistan
- Nigeria
- Iran

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

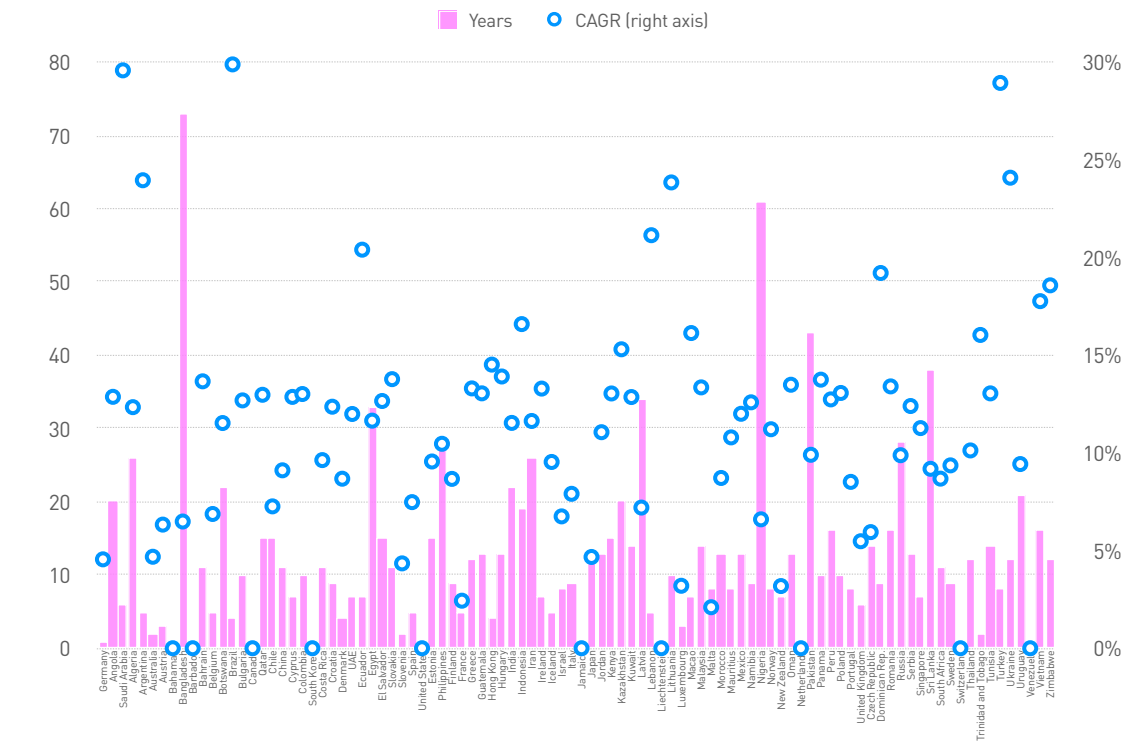
decreased slightly in 2022, mainly due to the performance of the BRICS (see Chart 3.3-a). Specifically, it is estimated that the BRICS group would need 15 years to close its local insurance gap in the Non-Life segment. To achieve this, the compound annual growth rate (CAGR) of premiums would need to be 9.1% over the next 11 years for China (versus real growth in 2022 of 0.8%). India would need to grow annually at 11.5% (4.9% real growth) over the next 22 years. Russia and South Africa would take 28 and 11 years, respectively, with a CAGR of 9.9% and 8.7%, versus real decreases of -19.6% and -3.2% in 2022. Finally, Brazil, also a member of the BRICS, would need four years of growth at 29.9%, compared to the 26.2% growth obtained in 2022 (see Chart 3.3-b).

The remaining developed countries need six years to close their local insurance gap in the Non-Life segment, one more than the previous year. The G7 would need five years, three more than the previous year, while the rest of the emerging countries need an average of 16 years to close the gap, which is two years more than the previous year. This is because, despite the growth achieved in premium volume (except for the -4.7% drop in the rest of the developed countries), it has been insufficient to close the gap with the benchmark, which has led to a negative variation in the relative penetration index and a positive variation in the IPG in terms of GDP.

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

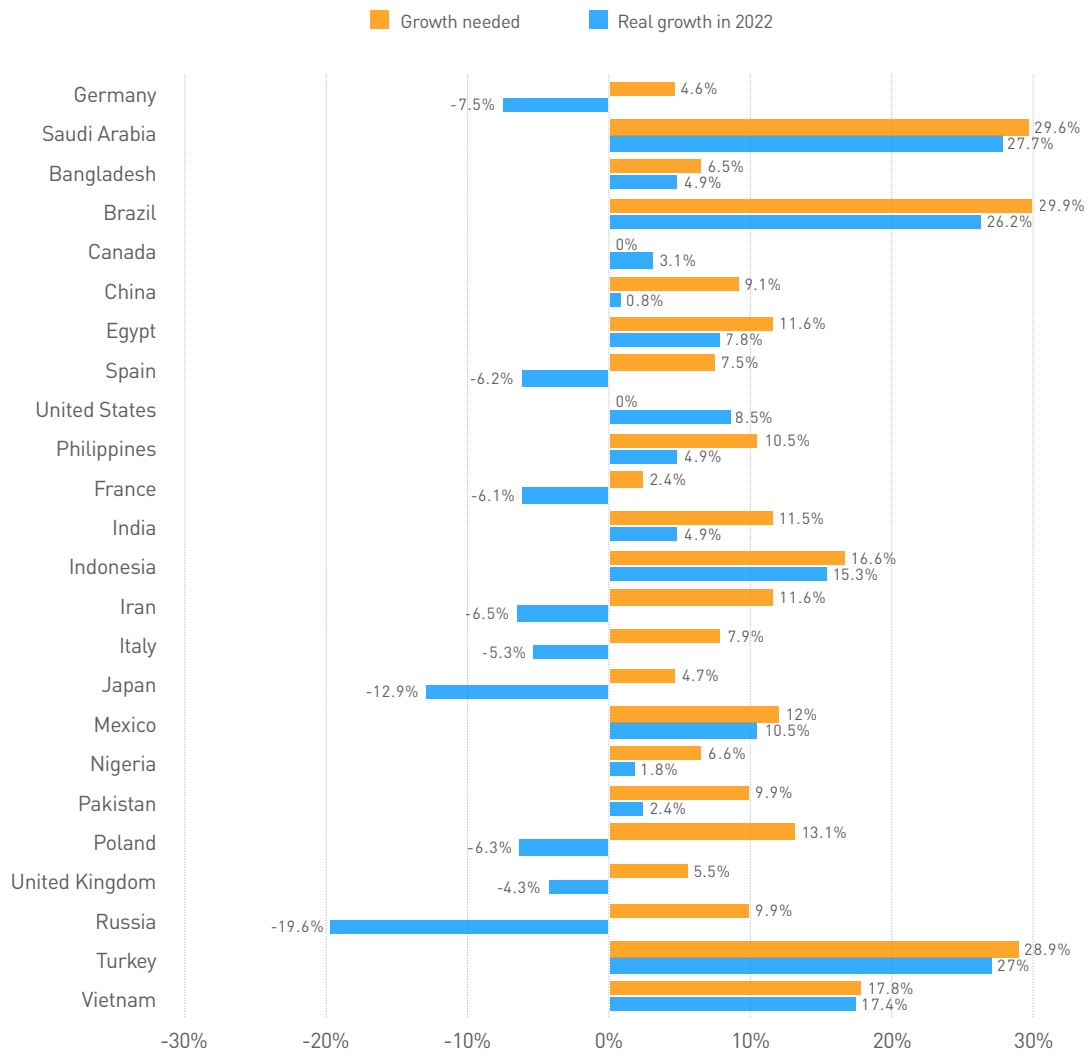
Insurance potential in the Non-Life segment, measured using the GAI and MAPFRE GIP, has shown an increasing trend over the 2017-2022 period, with some notable variations in 2020 as a result of the

Chart 3.3-a
Non-Life: years and annual growth needed to close the IPG



Source: MAPFRE Economics

Chart 3.3-b
Non-Life: actual premium growth in 2022 vs. growth needed to close the IPG for Tier-1 and Tier-2

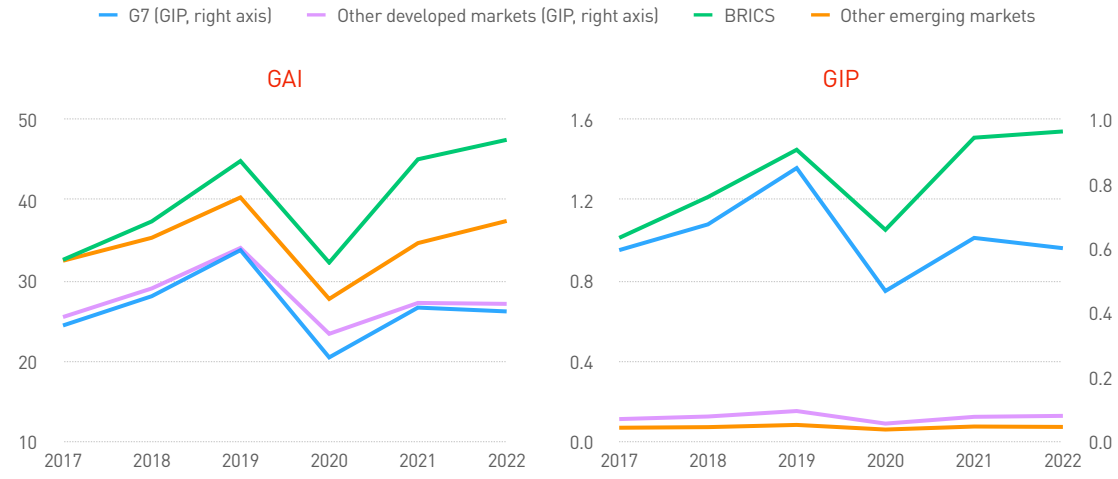


Source: MAPFRE Economics

pandemic. These values have only recovered for the BRICS group in the median GAI and MAPFRE GIP (see Charts 3.4-a and 3.4-b). In general, insurance potential (measured as the GAI trend) in the Non-Life segment has increased in the last two years, although more modestly in the rest of the emerging countries and stagnating in the G7 and the rest of the developed countries. The MAPFRE GIP values have shown a smoother trend, as this indicator is weighted by the benchmark GDP. Nevertheless, it confirms the aforementioned trend in the GAI. The Tier-1 countries (three of which are part of the BRICS) have led the growth in insurance potential in the Non-Life segment, followed by the Tier-2 group (which includes some of the developed countries of the G7). These groups have shown steady growth in the GAI and MAPFRE GIP values over the years, although they are still below pre-pandemic levels.

For all economic regions and tiers over the 2017-2022 period, the GDP growth gap has remained the dominant component,

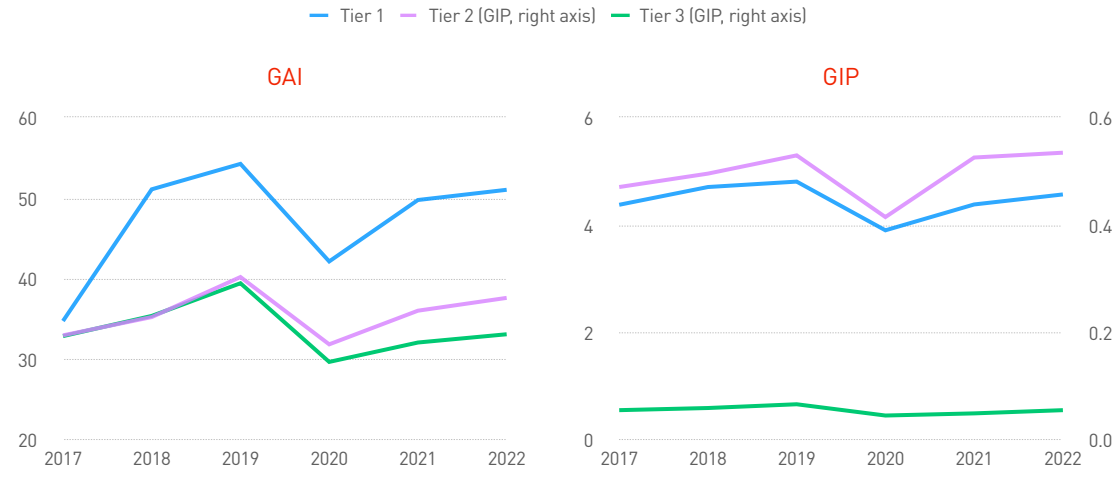
Chart 3.4-a
Non-Life segment: evolution of the median GAI and GIP, by economic grouping



Source: MAPFRE Economics

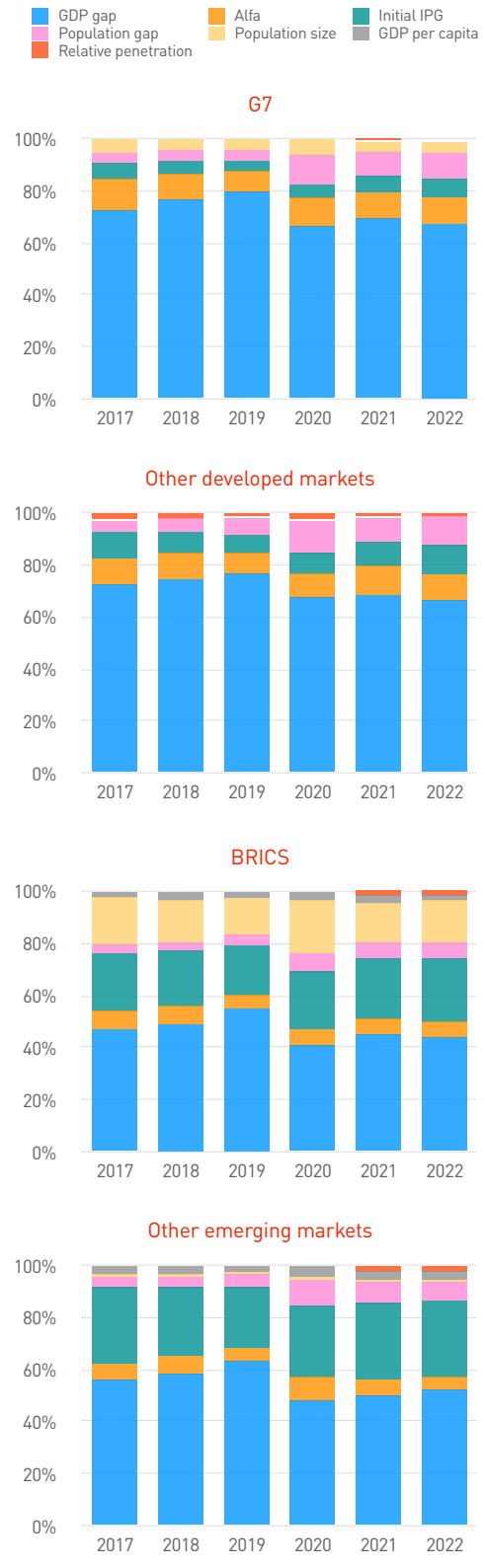
accounting for more than 50% of the GAI, except in the BRICS (44.3%), where the population level, and especially the IPG gap (which explained more than 39% together in 2022), are also gaining importance compared to the G7 countries and other developed markets. Therefore, the latter are more sensitive to changes in the IPG, the relative penetration rate, and the population factor (see Chart 3.4-c). In addition, in the Non-Life segment it can be seen that the GDP growth gap was less relevant to the GAI figures in 2022 compared to previous years in favor of factors such as the population level and the IPG. Consequently, the changes in potential growth during this year are attributable to a greater extent to these factors than to potential GDP growth. This is true for all the regions analyzed, except for the rest of the emerging markets, which are more sensitive

Chart 3.4-b
Non-Life segment: evolution of the median GAI and GIP, by tier



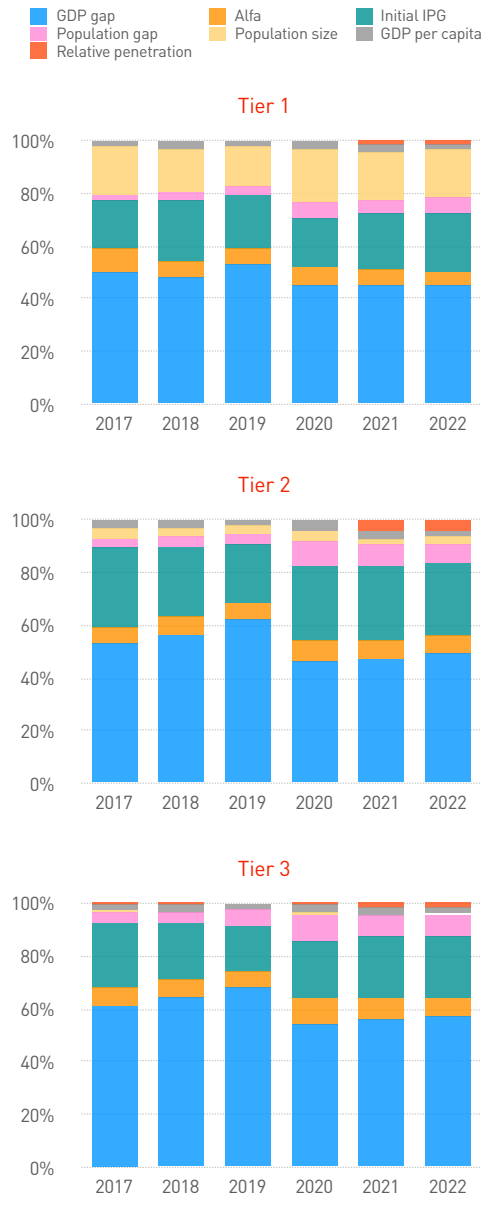
Source: MAPFRE Economics

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



Source: MAPFRE Economics

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



Source: MAPFRE Economics

to the GDP gap (which has grown from 50% to 51.5%) and are in turn mostly located in Tier-2, where the trend has been an increase from 47.4% to 49.1% for this component of the GAI (see Chart 3.4-d).

Compared to the Life segment, the decline in the share of the GDP growth gap in the GAI has been notably smaller in the Non-Life

segment. This suggests that, in this insurance segment, other components also influence insurance potential, such as the elasticity of demand to the economic cycle and the population level. In summary, the GDP growth gap has lost ground as an increasingly important component in determining insurance potential in the Non-Life segment. However, market dynamics and sensitivities may vary across insurance segments. This can be seen in the differences observed in the Tiers and economic regions in the Non-Life segment compared to the Life segment.

4. Summary of conclusions

The main conclusions that can be drawn from this report include the dynamics of insurance potential in the context of the post-pandemic economic recovery, highlighting the importance of the insurance gap and the regional differences in insurance markets in both the Life and Non-Life segments. In addition, it indicates that there are high-potential emerging markets that could play a major role in the insurance industry's future. In this regard, Egypt tops the list of countries on the radar in both the Life and Non-Life segments in 2022. This indicates the high potential for closing the insurance gap in the Life segment (primarily in the GDP gap, which accounts for 47.6% of the GAI) with a GAI of 63.0 points; the same is true in the Non-Life segment, with a GAI of 64.7 points (where the IPG accounts for 36.4% of the GAI and the GDP gap for 46.4%).

Projections indicate that, all things being equal, the insurance gap in the Life segment could be closed within 8 to 30 years in developed and emerging markets, respectively. For the Non-Life segment, this gap is expected to close within 5 to 16 years in these same markets. These estimates suggest that, while insurance potential is growing, it will still take time to reach optimal insurance levels worldwide.

In addition, the report highlights that both the GAI and MAPFRE GIP insurance potential indices have experienced a recovery after the negative effects of the COVID-19 pandemic. However, they have not fully recovered to pre-pandemic levels. This recovery pattern has been more muted in the Non-Life segment compared to the Life segment.

From the perspective of country groupings and statistical groups (Tiers), it can be seen that the GAI response in Tier-2 is different from Tier-3, a difference that is not as pronounced in the Life segment. In addition, the statistical significance of the population level, which is a key factor explaining about 17% of the GAI in both the BRICS and Tier-1, has decreased compared to the previous year. This is due to both an increased importance of the GDP gap factor and stagnation in population growth, especially in emerging countries, as a result of the COVID-19 pandemic.

Ultimately, it should be stressed that insurance potential is not static and varies over time depending on the evolution of its components. These differences are manifested differently in developed and emerging economies. In developed economies, the effects of income and elasticity of demand are dominant, while in the emerging markets the market size and the need to achieve convergence take priority. These differences have in turn led to differing behavior in these economic regions in terms of developing insurance potential, which means that the emerging markets have higher potential as they are larger in terms of population and GDP figures, which is associated with the needs for convergence in these economies.

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, in an ex post approach, is based on observed losses. 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 that analyzes optimal protection levels, estimated as the difference between the level of coverage socially and economically appropriate to cover risk compared to 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. The 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.

Once the parameters dictated by the IPG were defined, a simulation method was derived based on initial conditions and growth differentials relating to income levels, population levels and the elasticity of insurance premiums to the economic cycle. Thus, comparison of the simulation results with the results from the initial definition allowed the effectiveness of the projections and their predictive capacity to be measured. 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
Worldwide ranking for the MAPFRE GIP, GAI and years needed to close IPG

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

Country	MAPFRE GIP	Ranking			GAI
		2022	Δ 2022-2021*	Δ 2022-2012*	
China	9.792	1	0	0	53.00
United States	5.628	2	0	0	36.28
India	4.105	3	0	0	56.75
Russia	1.453	4	0	0	44.77
Indonesia	1.234	5	0	0	50.20
Germany	0.934	6	0	3	28.89
Turkey	0.899	7	0	7	46.39
Brazil	0.795	8	1	-2	34.00
Mexico	0.681	9	1	1	40.73
Japan	0.668	10	-2	-2	19.23
Saudi Arabia	0.647	11	1	-4	49.40
Egypt	0.643	12	2	-1	63.01
United Kingdom	0.563	13	0	13	25.25
France	0.534	14	-3	2	23.25
Pakistan	0.533	15	0	-2	57.63
Iran	0.501	16	0	-4	51.36
Canada	0.443	17	3	5	32.00
Bangladesh	0.412	18	4	2	53.45
Nigeria	0.404	19	4	-4	51.84
Poland	0.398	20	-2	12	40.17
Spain	0.397	21	0	4	29.86
Italy	0.392	22	-5	-3	21.05
Vietnam	0.386	23	1	-2	47.99
South Korea	0.359	24	-5	4	22.82
Australia	0.335	25	1	-2	33.78
Philippines	0.325	26	1	-2	45.63
Thailand	0.300	27	-2	-10	33.28
Argentina	0.296	28	2	-10	39.65
Colombia	0.295	29	2	1	46.07
Malaysia	0.245	30	3	1	35.38
Netherlands	0.239	31	-2	5	31.83
Romania	0.218	32	0	10	45.15
UAE	0.191	33	4	-6	37.86
Algeria	0.176	34	2	-5	48.67
Kazakhstan	0.174	35	0	0	47.32
South Africa	0.137	36	-2	1	23.64
Ireland	0.136	37	3	40	34.69
Norway	0.136	38	15	13	35.59
Belgium	0.132	39	-1	13	28.47
Ukraine	0.131	40	-12	-6	47.91
Chile	0.128	41	0	3	35.38
Switzerland	0.126	42	0	4	28.32
Peru	0.125	43	0	-4	40.17
Singapore	0.122	44	1	-1	27.82
Austria	0.115	45	-1	4	30.85
Czech Republic	0.114	46	-7	9	35.61
Angola	0.099	47	-1	-2	65.63
Sweden	0.099	48	-1	2	23.92
Israel	0.097	49	0	5	33.55
Sri Lanka	0.092	50	0	-10	47.20
Kenya	0.091	51	0	6	48.07
Hungary	0.091	52	-4	10	36.86
Qatar	0.089	53	1	-20	47.08
Morocco	0.086	54	-2	-7	38.87
Portugal	0.080	55	1	8	30.67
Greece	0.077	56	1	2	32.62
Dominican Rep.	0.075	57	2	3	48.16
Denmark	0.068	58	0	11	25.47
Hong Kong	0.067	59	-4	-3	21.59
Kuwait	0.065	60	2	-19	43.06
Bulgaria	0.057	61	-1	3	43.11
Ecuador	0.056	62	2	-9	39.65
New Zealand	0.054	63	-2	3	33.39
Guatemala	0.051	64	4	-3	44.40
Oman	0.048	65	2	-17	41.55
Finland	0.047	66	-3	7	23.49
Panama	0.046	67	5	5	43.81
Tunisia	0.044	68	1	-9	46.41
Serbia	0.043	69	-3	1	43.57
Slovakia	0.042	70	-5	1	33.56
Croatia	0.035	71	0	9	36.87
Lithuania	0.034	72	-2	6	40.63
Jordan	0.033	73	0	-8	43.41
Costa Rica	0.030	74	0	1	38.71
Bahrain	0.022	75	1	-1	39.25
Slovenia	0.021	76	-1	9	33.13
Uruguay	0.020	77	5	-1	32.45
El Salvador	0.019	78	3	3	44.97
Luxembourg	0.018	79	-2	4	31.93
Latvia	0.017	80	-2	4	37.22
Lebanon	0.015	81	-2	-14	30.97
Estonia	0.015	82	-2	5	38.09
Zimbabwe	0.012	83	1	-4	47.25
Botswana	0.011	84	-1	2	38.85
Cyprus	0.009	85	0	4	33.42
Trinidad and Tobago	0.009	86	2	-4	33.05
Jamaica	0.007	87	3	1	34.05
Malta	0.006	88	-2	4	35.27
Mauritius	0.006	89	-2	1	30.33
Iceland	0.005	90	2	4	33.33
Namibia	0.004	91	0	0	21.89
Bahamas	0.003	92	1	1	30.83
Macao	0.002	93	-4	-25	10.24
Barbados	0.001	94	0	1	28.69
Liechtenstein	0.000	95	0	1	22.72
Venezuela	0.000	97	-1	-59	20.65

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: MAPFRE GIP global ranking and GAI values

Country	MAPFRE GIP	Ranking			GAI
		2022	Δ 2022-2021*	Δ 2022-2012*	
China	9.509	1	0	0	51.47
United States	4.736	2	1	1	30.53
India	4.572	3	-1	-1	63.20
Russia	1.542	4	0	1	47.51
Indonesia	1.256	5	0	-1	51.06
Germany	0.848	6	0	7	26.23
Turkey	0.806	7	2	7	41.59
Brazil	0.722	8	0	-2	30.88
Japan	0.673	9	-2	-2	19.37
Egypt	0.660	10	3	0	64.69
Mexico	0.629	11	0	-2	37.62
France	0.601	12	-2	3	26.18
Pakistan	0.563	13	-1	-1	60.90
United Kingdom	0.548	14	0	16	24.59
Saudi Arabia	0.535	15	2	-7	40.87
Italy	0.521	16	-1	1	28.01
Iran	0.493	17	1	-6	50.54
Bangladesh	0.485	18	-2	0	62.89
Nigeria	0.430	19	0	-3	55.07
Vietnam	0.404	20	1	0	50.20
Spain	0.366	21	1	6	27.57
Poland	0.360	22	1	4	36.39
Canada	0.345	23	1	8	24.94
Philippines	0.341	24	1	-3	47.76
South Korea	0.330	25	-5	-2	20.95
Thailand	0.304	26	0	-7	33.69
Malaysia	0.278	27	0	-3	40.23
Australia	0.245	28	0	1	24.70
Argentina	0.237	29	1	-7	31.68
Colombia	0.232	30	1	2	36.17
Romania	0.210	31	2	10	43.32
Netherlands	0.202	32	0	11	26.93
South Africa	0.173	33	1	2	29.84
Algeria	0.171	34	1	-9	47.27
Kazakhstan	0.169	35	1	-2	45.98
UAE	0.158	36	6	-8	31.39
Ireland	0.153	37	1	31	38.83
Singapore	0.144	38	2	0	32.94
Belgium	0.134	39	-2	8	28.98
Ukraine	0.130	40	-11	-6	47.44
Norway	0.125	41	12	14	32.73
Peru	0.120	42	-1	-3	38.61
Chile	0.116	43	-4	-1	32.14
Czech Republic	0.106	44	0	7	33.02
Sweden	0.103	45	-2	7	24.95
Austria	0.101	46	0	7	27.12
Switzerland	0.095	47	0	2	21.36
Hungary	0.093	48	0	9	37.65
Israel	0.091	49	1	7	31.72
Sri Lanka	0.090	50	-5	-10	46.27
Kenya	0.085	51	1	7	44.63
Angola	0.082	52	-3	-4	53.96
Portugal	0.080	53	1	6	30.70
Greece	0.080	54	2	6	33.89
Hong Kong	0.076	55	-4	-10	24.47
Morocco	0.073	56	-1	-6	33.04
Qatar	0.071	57	1	-21	37.68
Dominican Rep.	0.065	58	1	4	41.69
Denmark	0.064	59	-2	15	24.06
Kuwait	0.059	60	6	-16	39.37
Bulgaria	0.050	61	1	4	37.99
Finland	0.049	62	-2	8	24.29
Ecuador	0.048	63	-2	-9	34.08
Guatemala	0.045	64	0	-3	39.72
Oman	0.043	65	3	-19	37.29
Slovakia	0.043	66	-3	-2	34.97
Serbia	0.040	67	0	0	40.49
New Zealand	0.039	68	-3	8	24.27
Panama	0.039	69	1	2	36.88
Lithuania	0.035	70	-1	7	42.21
Tunisia	0.035	71	0	-5	37.25
Croatia	0.031	72	0	8	33.07
Jordan	0.026	73	0	-4	34.87
Costa Rica	0.025	74	0	1	31.39
Uruguay	0.020	75	3	-2	32.98
El Salvador	0.019	76	0	5	43.91
Luxembourg	0.019	77	-2	5	33.13
Bahrain	0.018	78	-1	0	33.67
Latvia	0.018	79	1	5	40.11
Slovenia	0.018	80	-1	7	27.45
Estonia	0.014	81	0	5	37.43
Lebanon	0.014	82	0	-10	29.23
Botswana	0.012	83	0	2	41.79
Zimbabwe	0.012	84	0	-5	46.91
Cyprus	0.009	85	0	4	33.59
Trinidad and Tobago	0.007	86	2	-3	27.90
Malta	0.007	87	0	5	38.44
Jamaica	0.005	88	3	3	25.46
Mauritius	0.005	89	1	-1	24.74
Namibia	0.005	90	-1	0	29.03
Iceland	0.004	91	1	4	25.11
Macao	0.004	92	-6	-29	16.35
Bahamas	0.002	93	0	0	23.56
Barbados	0.001	94	0	0	24.15
Liechtenstein	0.000	95	0	1	25.18
Venezuela	0.000	97	-1	-60	0.00

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-3
Life segment: years needed to close the 2022 domestic IPG

Country	Years	Country	Years
China	13	Israel	10
United States	9	Sri Lanka	92
India	12	Kenya	23
Russia	30	Hungary	26
Indonesia	33	Qatar	50
Germany	9	Morocco	18
Turkey	63	Portugal	12
Brazil	10	Greece	18
Mexico	19	Dominican Rep.	21
Japan	0	Denmark	0
Saudi Arabia	43	Hong Kong	0
Egypt	43	Kuwait	42
United Kingdom	0	Bulgaria	65
France	2	Ecuador	9
Pakistan	60	New Zealand	18
Iran	35	Guatemala	26
Canada	7	Oman	55
Bangladesh	64	Finland	0
Nigeria	19	Panama	43
Poland	45	Tunisia	32
Spain	11	Serbia	46
Italy	1	Slovakia	27
Vietnam	10	Croatia	38
South Korea	37	Lithuania	57
Australia	0	Jordan	44
Philippines	23	Costa Rica	38
Thailand	13	Bahrain	36
Argentina	75	Slovenia	16
Colombia	34	Uruguay	10
Malaysia	8	El Salvador	22
Netherlands	14	Luxembourg	4
Romania	67	Latvia	59
UAE	18	Lebanon	16
Algeria	42	Estonia	54
Kazakhstan	41	Zimbabwe	12
South Africa	0	Botswana	14
Ireland	6	Cyprus	13
Norway	8	Trinidad and Tobago	10
Belgium	8	Jamaica	13
Ukraine	0	Malta	10
Chile	16	Mauritius	12
Switzerland	8	Iceland	37
Peru	20	Namibia	0
Singapore	0	Bahamas	10
Austria	14	Macao	-
Czech Republic	22	Barbados	8
Angola	74	Liechtenstein	-
Sweden	0	Venezuela	-

Source: MAPFRE Economics

Appendix: Table A-4
Non-Life segment: years needed to close the 2022 domestic IPG

Country	Years	Country	Years
China	11	Israel	8
United States	0	Sri Lanka	38
India	22	Kenya	15
Russia	28	Angola	20
Indonesia	19	Portugal	8
Germany	1	Greece	12
Turkey	8	Hong Kong	4
Brazil	4	Morocco	13
Japan	13	Qatar	15
Egypt	33	Dominican Rep.	9
Mexico	13	Denmark	4
France	5	Kuwait	14
Pakistan	43	Bulgaria	10
United Kingdom	6	Finland	9
Saudi Arabia	6	Ecuador	7
Italy	9	Guatemala	13
Iran	26	Oman	13
Bangladesh	73	Slovakia	11
Nigeria	61	Serbia	13
Vietnam	16	New Zealand	7
Spain	5	Panama	10
Poland	10	Lithuania	10
Canada	0	Tunisia	14
Philippines	28	Croatia	9
South Korea	-	Jordan	13
Thailand	12	Costa Rica	11
Malaysia	14	Uruguay	21
Australia	2	El Salvador	15
Argentina	5	Luxembourg	3
Colombia	10	Bahrain	11
Romania	16	Latvia	34
Netherlands	0	Slovenia	2
South Africa	11	Estonia	15
Algeria	26	Lebanon	5
Kazakhstan	20	Botswana	22
UAE	7	Zimbabwe	12
Ireland	7	Cyprus	7
Singapore	7	Trinidad and Tobago	2
Belgium	5	Malta	8
Ukraine	12	Jamaica	0
Norway	8	Mauritius	8
Peru	16	Namibia	9
Chile	15	Iceland	5
Czech Republic	14	Macao	7
Sweden	9	Bahamas	-
Austria	3	Barbados	-
Switzerland	0	Liechtenstein	-
Hungary	13	Venezuela	-

Source: MAPFRE Economics

Index of tables and charts

Tables

Charts

References

1/ See: MAPFRE Economic Research (2018), *Global Insurance Potential Index,* Madrid, Fundación MAPFRE.

2/ See: MAPFRE Economics (2022), *MAPFRE GIP 2022*, Madrid, Fundación MAPFRE.

3/ 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. For the 2022 fiscal year, the benchmark for the Non-Life market would be Germany and for Life it would be Japan. As a comparison, in the analysis with 2021 data performed in our previous report, the benchmark for the Non-Life and Life markets were Germany and France, respectively.

4/ The methodological details of the MAPFRE GIP calculation (which can be found in the appendix to this report) explain how the variations at both the level and relative rates of the variables may impact the evolution of insurance potential at the time the analysis is conducted.

5/ See: MAPFRE Economic Research (2018), *Global Insurance Potential Index*, op.cit.

6/ The IPG figures calculated for previous years have been modified compared to the contents of previous reports, because statistical updates were made to the values used during previous years in relation to GDP and premiums. This has implications for calculating the insurance potential for some countries, and it therefore could produce changes to their position in the global ranking.

7/ The following countries are included in the BRICS economic grouping: Brazil, Russia, India, China, and South Africa.

8/ The G7 consists of Germany, Canada, United States, France, Italy, Japan and the United Kingdom.

9/ See: MAPFRE Economics (2023), *2023 Economic and Industry Outlook: Perspectives on the third quarter*, Madrid, Fundación MAPFRE.

10/ As in previous MAPFRE GIP reports, in this update when calculating regional averages, data from some countries have been excluded because they distorted the sample, either due to the country's size or particular situation: San Marino, Liechtenstein, Barbados, Bahrain, and Qatar.

11/ This report does not take into account the 7.951 billion people who, according to United Nations data, made up the world's population in 2022, since it covers only a sample of 96 countries rather than the full global population.

12/ A statistical review of the sources of information related to premium volumes and the different macroeconomic and population variables used in the analysis has produced minor changes to the MAPFRE GIP scoring presented in previous editions, 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/ See: MAPFRE Economic Research (2019), *MAPFRE GIP 2018*, Madrid, Fundación MAPFRE.

15/ The change in the ranking compared to the previous year may differ from what was published in previous versions of this report based on the recalculations made this year with the updated population and insurance premium information.

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MAPFRE GIP 2023

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.