The Latin American insurance market in 2018
MAPFRE Economic Research would like to expressly acknowledge and thank the regulatory and supervisory bodies in the various Latin American insurance markets for their valuable contribution to this report. Their involvement and support has made a very significant contribution to the preparation of this report.
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MAPFRE Economic Research updates its report, *The Latin American insurance market*, published by Fundación MAPFRE, on a yearly basis. On this occasion, we are pleased to present a new edition of this report which comprehensively analyzes the performance of the insurance industry in nineteen different Latin American countries in 2018 and its evolution over the period 2008-2018, with an overview of the main regulatory and legislative changes taking place in the region. In addition, the study provides an overview of Latin American insurance activity, by examining the economic and industry factors that have influenced its behavior.

The following data from the report gives an idea of the size of the markets analyzed and their level of development: the aggregate premium volume totaled 150.6 billion dollars in 2018, representing 3% of global insurance premiums. With a population of more than 600 million, Latin America’s per capita spending on insurance was 247 dollars last year and the penetration index (premiums/GDP) came to 2.9%. The depth index, representing the ratio of life insurance premiums to total premiums, stood at 44.6%. Although all these indicators have seen a positive performance over the last decade, they are still far from reaching the degree of insurance considered economically necessary and beneficial for society, with the Insurance Protection Gap for the Latin American market estimated at 254.3 billion dollars in 2018.

Among the factors that can help close this insurance gap, alongside those of an economic nature, are those related to the application of an efficient regulatory framework and the use of public policies aimed at increasing financial inclusion and education. Furthermore, private initiative can also contribute to the dissemination of knowledge on insurance and the improvement of its social recognition, as Fundación MAPFRE has been promoting for many years, through the publication of studies and research such as the one we are presenting now.

**Fundación MAPFRE**
Introduction

As in previous editions, our report, *The Latin American insurance market in 2018*, aims to contribute to the analysis of the behavior of this sector in Latin America, from both a regional perspective and that of each of its component markets. In this regard, the report addresses the main figures and trends of the Latin American insurance markets over the past year, reviewing aspects such as the growth of premiums, the items of the industry’s aggregate balance sheet, technical provisions, investment, technical performance, as well as results and profitability.

One of the main characteristics of this report is that, aside from analyzing the performance of insurance markets in 2018, it also looks at the evolution of the Latin American insurance industry over the last decade. This includes a review of the main structural trends underpinning the growth of this activity, such as penetration, density, and insurance depth. The report also provides an update of the estimates for the Insurance Protection Gap and the Market Development Index for each of the countries under analysis.

The study is complemented by a trend analysis of the concentration of the insurance industry, both regionally and for each individual market, including the 2018 rankings of the main insurance groups operating in the countries under review. Finally, the report includes a description of the most relevant regulatory changes that have occurred in the region’s insurance markets over the past year, as well as a preview of the most important changes anticipated for 2019, for which the valuable collaboration of Latin American insurance supervisory bodies has once again been instrumental.

We hope that this new edition of our report will continue to contribute to a better understanding of how the Latin American insurance market works, and that it will be an additional means of supporting the economic and social development of the countries within the region.

MAPFRE Economic Research
Economic landscape

The global economy and the insurance industry

The global economy posted growth of 3.6% in 2018, passing its cyclical peak and entering into a period of slowdown characterized by the divergence in growth trends of certain economies, many of which are clearly slowing down (the European Union), while others are still managing to sustain the relative pace (the USA and China). However, in the final months of 2018, the central banks of the world’s major economies initiated a clear shift toward more lax monetary policy in order to deal with the slowdown in global activity levels. As a result, financial conditions in emerging countries are expected to loosen in upcoming years thanks to increased external financing and currencies suffering less depreciation pressure compared to the US dollar.

In this global economic context, global insurance market growth in 2018 is estimated at 1.5% in real terms, reaching 5.2 trillion dollars in direct insurance premiums. Non-Life branches were the main driving force behind this performance, favored by a dynamic global economy throughout the fiscal year, most notably during the first half of the year. Global premium volume in the Non-Life segment, which represents about 46% of total premiums, increased by 3.0% in real terms during the course of 2018. Growth was solid in emerging economies, chiefly Asia, with performance in China and India standing out. Latin American markets showed moderate growth. However, the slowdown of the main economies and the exhaustion of the cycle might well begin to affect the growth of premiums in this segment.

The Latin American economy

Latin America’s economy visibly slowed during the transition from 2017 to 2018, mainly as a result of escalating trade tensions, volatile commodity prices that deteriorated terms of trade, and worsening financial conditions as a result of the normalization of monetary policy initiated by the United States Federal Reserve in 2018.

As a result, the regional economy grew from 1.2% of GDP in 2017 to 1.0% in 2018, reinforcing the idea that the region is finding it increasingly difficult to grow in a sustained manner and at high rates in the long-term. The development of long-term savings, investment in infrastructure and productivity are still challenges that the region must face in order to speed up its potential growth. In 2018, the headwinds experienced were amplified by country-specific vulnerabilities, leading to not only a more moderate but also an unbalanced economic recovery: slowing down in large economies such as Mexico or Brazil, halting in others such as Argentina, and exacerbating severe recession as in the case of Venezuela. On the other hand, other economies of the region maintained high growth rates, such as the Andean states, where improved terms of trade and consumer and business confidence have boosted growth prospects.

The Latin American insurance market in 2018

Regional market performance

In 2018, the Latin American insurance market stood at 150,593 million dollars in premiums, with a loss of 5.5% (compared to growth of 8.6% in 2017). Overall, premiums in the Life insurance segment accounted for 44.6% of
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Total premiums in the region’s insurance industry, with a contraction of 7.2% in dollars (versus 9% growth in 2017). Non-Life insurance premiums represented 55.4% of total premiums in the region, falling by 4.0% (compared to an 8.2% increase in 2017).

It is important to note that these declines are closely related to the currency depreciation suffered by several economies in the region (especially the Argentine peso and the Brazilian real) when growth is measured in dollars. If measured in their respective currencies, after inflation has been corrected, the insurance markets in the different countries analyzed have generally performed positively. However, there are notable exceptions, as is the case with Argentina and Brazil, with the latter market being further aggravated by the fall in the Life insurance segment, which was affected by the lower interest rates resulting from its accommodative monetary policy. The performance of exchange rates, combined with the economic slowdown in certain countries and the impact of various monetary policies, has contributed to a less dynamic and unbalanced growth scenario in the region’s insurance markets, which primarily affected the Life insurance segment.

For Non-Life insurance, a large part of the lines of business that make up this market segment declined. The most relevant line of business in terms of size, Auto, which represents 18.7% of total premiums, contracted by 7.4%, in contrast to the growth experienced in 2017 (9.3%). In the Life insurance segment, premiums for individual and group Life insurance fell, but those for Pension insurance grew. Individual and group life insurance (85.6% of total life insurance) fell by 9.1%, which can largely be explained by the fall in this line of business in Brazil.

As indicated above, the vast majority of insurance markets in the region reported growth in premium volume in their respective currencies, with only Guatemala, Argentina, Brazil, Uruguay, and Venezuela suffering setbacks. In the other countries, the performance was positive albeit relatively uneven. It is important to highlight the markets of Mexico and Colombia, which experienced growth, although they sustained a certain slowdown with respect to the previous year, compared to other markets, such as Peru or Chile, which experienced notable growth in line with the strong performance of their respective economies. The growth registered in the Dominican Republic, Bolivia, Puerto Rico, Panama, and El Salvador is also worth noting.

The aggregate net result of the Latin American insurance market stood at 12.06 billion dollars in 2018, representing a growth of 35.8% over the previous year. The majority of markets showed growth in profits, when measured in dollars, with the exception of Bolivia, Chile, Colombia, Ecuador, Mexico, Puerto Rico, and Uruguay. In terms of return on equity (ROE), the markets in Argentina (28.6%), Dominican Republic (24.7%), Nicaragua (24%), Guatemala (22.9%), Brazil (22.3%), Mexico (22.1%), Honduras (21.4%) and Paraguay (17.3%) registered the highest rates. By contrast, the insurance markets of El Salvador (9.2%), Ecuador (8.3%), Costa Rica (7.1%), Puerto Rico (5.4%), Uruguay (2.8%) and Venezuela (1.4%) recorded the lowest ratios.

Meanwhile, the Latin American insurance markets with the highest levels of concentration in 2018 have remained Costa Rica, Uruguay, Nicaragua, and Peru, with a Herfindahl index above the threshold, indicating high levels of industry concentration. Honduras, Panama, the Dominican Republic, and Guatemala achieved values equating to markets with a moderate level of concentration. The remaining Latin American markets reported indexes below the threshold associated with moderate levels of concentration.

Structural trends in the insurance industry

In terms of structural trend indicators, the penetration index (premiums/GDP) stood at 2.9% in 2018, unchanged on the previous year. The indicator is unchanged in both the Life (1.3%) and Non-Life (1.6%) segments. An analysis of the changes in this indicator since 2008 reveals an increase of 0.6 percentage
points, confirming for a further year the growing trend we have been witnessing over the last ten years, with the growth of the Life insurance segment making the biggest contribution and Non-Life insurance player a smaller role. On an aggregate basis over the last ten years (2008-2018), total penetration in the region has risen by 24.4%. The cumulative increase in penetration in the Life insurance segment came to 53.1%, while the cumulative increase in Non-Life insurance was 8.1% over the same period. These growth figures, while undeniably significant, still fall somewhat short of the figures reported for the decade 2007-2017.

As in previous years, Puerto Rico continues to report the highest penetration index, reaching 13.4% in 2018, due to the important role played by insurance companies in its health system. The markets that managed to improve their score under this indicator in 2018 were Puerto Rico, Chile (4.6%), Brazil (3.1%), Colombia (2.8%), and Argentina (2.7%).

Meanwhile, the density indicator (premiums per capita in dollars) stood at 246.6 dollars, -6.4% below the level registered for the previous year and ending the two-year period of consecutive increases. This performance was largely due to the currency depreciation suffered by several economies in the region against the dollar (mainly the Brazilian real and the Argentine peso), although the drop in the Brazilian Life insurance market also contributed in a more structural fashion. It should be noted that, as in the previous year, the bulk of insurance spending per person remains focused on the Non-Life segment (136.7 dollars), down 4.9% on the previous year. Meanwhile, Life insurance density amounted to 109.9 dollars, down 8.1% from 2017.

Density has been on a upward path over the medium-term in the region; the overall indicator grew 33.4% between 2008 and 2018. The cumulative increase in the Life insurance market over the period amounted to 64.2% (rising from 67 to 109.9 dollars), while cumulative growth in Non-Life insurance was 15.9% (from 117.9 to 136.7 dollars). As was also the case with the penetration index over the 2008-2018 period, the density index also shows a certain growth slowdown when compared with the 2007-2017 period. Notwithstanding the above, overall trend in density is confirmed by an individual analysis of each of the markets featured in this report, which points to a trend toward increasing density over recent years especially when measured on a local currency basis, thereby isolating the effect of exchange rate volatility.

Lastly, the insurance depth index (the ratio of life insurance premiums to total premiums) stood at 44.6% in 2018, 0.8 percentage points less than in 2017, and was heavily influenced by the performance of the Life segment in the Brazilian market. On a medium-term horizon (2008-2018), the indicator registered an improvement, with a cumulative increase of 8.4 percentage points and a cumulative growth rate of 23.1% over that period.

The Insurance Protection Gap (IPG) for the Latin American insurance market in 2018 is estimated at 254.3 billion dollars, 1.9% less than the figure estimated for the previous year. The structure of the IPG over the last ten years does not show significant changes with respect to our previous report, confirming the predominance of Life insurance and, therefore, shows greater growth potential. As a result, the potential insurance market in Latin America in 2018 (the sum of the actual insurance market plus the IPG) stood at 404.9 billion dollars, 2.7 times larger than the current regional market (150.6 billion dollars).

Over the 2008-2018 period, the insurance market registered an average annual growth rate (in dollars) of 4%, with average growth of of 6.2% in Life insurance and 2.6% in the case of Non-Life. Were the same rate of growth to continue over the next ten years, the combined market growth rate would fall short of closing the IPG in 2018 by 6.4 percentage points. We get the same result whether we analyze the Life insurance segment (short 6.7 percentage points) or the Non-Life Insurance segment (short 5.4 percentage points), with the situation having deteriorated with regard to the inability to close the gap over the coming ten years relative to the measurement made in our 2017 report.

Lastly, this edition of the report includes a new estimate of the Market Development Index (MDI) for the Latin American insurance industry. The MDI (which aims to summarize trends regarding the development and maturity
of insurance markets) has shown a sustained improvement over the last ten years for the Latin American insurance market, despite suffering a slight dip in in 2014 and again in 2018. Despite these temporary setbacks, the positive trend in the industry over the 2008-2018 period shows that the region’s insurance market continues to experience positive and well-balanced growth, especially when viewed from a medium-term perspective.
1. Economic and demographic context

1.1 Economy

Global environment

The global economy grew 3.6% during 2018, emerging from a cyclical peak and heading on a downward path leading to its growth potential, which might be situated at 3.3% on average during 2019 and 2020 (See Chart 1.1-a). This stage of deceleration was characterized by the divergence between the growth rates of certain economies, many of which were clearly slowing down (European Union), while others maintained a relative pace (the USA and China). Central banks, which initially seemed out of step (with Japan and the eurozone still immersed in the stimulus phase, while the USA and some emerging countries remained in the restrictive phase), are now rapidly moving toward a more lax monetary policy.

The European Central Bank (ECB) postponed any potential interest rate hike, and the United States Federal Reserve no longer plans to reach a neutral interest rate during this cycle; the market is beginning to consider other likely possibilities, such as dropping interest rates or other additional stimulus measures. As a result, the financial conditions in emerging countries (restrictive during 2018) are expected to loosen in upcoming years thanks to increased external financing and currencies suffering less depreciation pressure in relation to the US dollar.

The global slowdown experienced in 2018 occurred within a context marked by two events. Firstly, global financial conditions are tightening due to the monetary normalization initiative of the Federal Reserve (interest rates higher than inflation and weaker balance sheets), obliging many emerging economies to join them in raising their own interest rates to stabilize monetary flows and exchange rates. Secondly, this cycle change has exposed certain latent risks in unbalanced economies (such as Turkey and Argentinian), with consequences for their exchange rate and the price of their assets; a situation that, however, has changed since the beginning of 2019.

The US economy maintained its impetus in 2018, with average growth of 2.9% and unemployment at its lowest level since the 1960s. This was accompanied by a core inflation rate hovering around 2%, the fruit of the Federal Reserve’s success in achieving its dual (implicit) mandate of employment maximization and price stabilization, imparting to it the credibility to justify future interest-rate hikes designed to cool off the economy without prematurely exhausting the cycle. The cycle is already the longest in recent history, and appears to be in step with the objective of the Federal Reserve to control a smooth transition to more sustainable growth rates without creating new imbalances. China attempted to foster leveraging policies during
2018, as well as to reduce tax and quasi-tax effects in order to mitigate any imbalances or possible risks, although finally they were reversed at year-end. The entry in force of US trade and export policies and the slowdown of the global economy are forces which are currently being successfully offset by renewed tax stimuli and private sector growth focused on stimulating internal demand.

At the same time, the trade dialectic between the United States and the rest of the world is already showing its first effects on global trade, especially through the expectations channel affecting investment and the exchange rate. The temporary truce between the USA and China during the G20 Summit held in Argentina temporarily smoothed tensions; however, the issue seems to have worsened, extending to other regions including Europe and Mexico.

In Europe, 2018 was marked by important events, including among others the first phase of the change of government in Spain, the elections in Italy and the challenges to its budgetary stability, and the ensuing unrest among creditors and the increase in its bond yields. Germany’s economy plateaued at 1.5%, and with it, the eurozone’s activity at 1.8% overall for the year. As a result, the ECB announced that interest rates would remain unchanged until the first half of 2020, and that the principal on matured bonds will be reinvested until well after monetary normalization, which will take some time to become reality. This “lower for longer” spirit is evident, and will remain at least until Mario Draghi is replaced at the ECB in October of this year.

The agreement posed between the United Kingdom’s government and the European Union (EU) was rejected by the British Parliament in successive votes, leading to the announcement that the Prime Minister Theresa May would step down on June 7, 2019. The EU has set a new deadline for the UK to implement its exit: October 31. Currently the situation is once again wide open, with a possible new referendum looming.

Finally, 2018 was a year in which elections were held in a key group of emerging countries (Brazil, Mexico, Colombia, and Turkey), and 2019 will be an election year for Argentina. Turkey and Argentina suffered massive losses in earning power in their exchange rates, which was mainly caused by their macro-economic vulnerabilities: the former due to private external indebtedness, and the latter due to public indebtedness (necessitating the request for emergency funding from the International Monetary Fund in the amount of 56.3 billion dollars). Meanwhile, in Asia, Indonesia raised interest rates four times in 2018 (from 4% to 6%), and the Philippines five times (from 3% to 4.75%). China’s central bank dropped its reserve deposit ratios three times for leading banks during the year (from 17% to 14.5%), relaxing the interbank 7-day repo rates 30 bps to 2.6% during 2018, with similar movements expected for 2019.

Latin American landscape

The Latin American economy visibly slowed down in the transition from 2017 to 2018, mainly as a result of escalating trade tensions, volatility in the price of raw materials that adversely affected the terms of trade, and worsening financial conditions as a result of the normalization of monetary policy initiated by the United States Federal Reserve in 2018.

As a result, Latin America’s economy grew from 1.2% of GDP in 2017 to 1.0% in 2018, bolstering the idea that the region is finding it increasingly difficult to grow in the long-term. The development of long-term savings, investment in infrastructure and productivity are still challenges that the region must face in order to speed up its long-term growth potential. In 2018, the emergence of headwinds was amplified by the specific vulnerabilities of each country, leading to not only a more moderate but also an unbalanced economic recovery: slowing down in large economies such as Mexico or Brazil, halting in others such as Argentina, and exacerbating severe recession as in the case of Venezuela. Other countries in the region, however, maintained high growth rates, such as the Andean states, where improved terms of trade and consumer and business confidence have boosted growth prospects.
Economic landscape and demand for insurance

According to the latest estimates, the global insurance market grew 1.5% in real terms in 2018, to reach a total value of 5.2 trillion dollars in premiums from direct insurance activity\(^2\). The Non-Life segment was the driving force behind this performance, favored by a dynamic global economy throughout the year, most notably during the first half of the year. The slowdown of the main economies and the exhaustion of the cycle might well begin to affect the growth of premiums in this segment. The global premium volume for the Non-Life segment, which accounts for some 46% of total premiums, was up 3.0% in real terms in 2018. Growths were solid in emerging economies, chiefly Asia, with performance in China and India standing out. Latin American markets showed moderate growth.

Life insurance premiums remained virtually unchanged during 2018, with a 0.2% growth in real terms, and a premium volume of 2.8 trillion dollars. Life premiums in China, one of the world’s largest insurance markets, depreciated in real terms during 2018, in large part due to the significant drop in risk-free interest along all sections of the curve and reforms implemented by Chinese authorities to reduce risk and increase the stability of the finance sector. Conversely, certain advanced markets, such as the United States and Japan, posted real premium growths in this sector. The majority of Latin American markets showed increased premiums in local currencies; however, the drop in Brazil, which is the largest market, was reflected in a weaker performance in this segment of the insurance market.

The economic slowdown experienced by Latin America in 2018, which was especially notable in the second half of the year, has had a negative impact on the development of the insurance market, which is strongly associated with the economic cycle, as can be seen by comparing regional developments in insurance premiums over the last ten years with changes in GDP over the same period (see Chart 1.1-b). This economic slowdown is reflected in the performance of insurance premiums, which were down 5.5% on aggregate terms versus growth of 8.6% in 2017. This considerable drop is closely related to the currency depreciation sustained by several economies in the region (especially the Argentine peso and the Brazilian real) when growth is measured in dollars. If measured in their respective currencies, after inflation has been corrected, the insurance markets in the different countries analyzed have generally performed positively. However, there are notable exceptions, as is the case with

![Chart 1.1-b](chart.png)

Source: MAPFRE Economic Research (with data from supervisory bodies and IMF)
Argentina and Brazil, with the latter market being further affected by the fall in the Life insurance segment, which was affected by the lower interest rates resulting from its accommodative monetary policy.

1.2 Demography

According to the latest population data for Latin America released by the United Nations in 2019, the estimated population of the 19 countries featured in this report for 2019 totaled 616.4 million. Brazil and Mexico account for a significant share of the total, with populations of 211.0 and 127.6 million, respectively. Colombia and Argentina both have populations of over forty million, with 50.3 and 44.8 million, respectively. These are followed by Peru and Venezuela, each with populations of around 32.5 and 28.5 million, respectively. The remaining countries have populations of below 20 million, with the largest belonging to Chile, Guatemala, and Ecuador, with populations ranging between 17 and 19 million (see Chart 1.2-a).

In terms of life expectancy, the UN’s updated projections for Latin America and the Caribbean point toward a trend of increasing population longevity. In line with this information, life expectancy at birth in the region rose from 51 years in 1950 to 75 years in 2019, representing an increase of 24 years over the period (see Chart 1.2-b). The projections estimate that life expectancy in the region could grow around two years per decade to reach over 81 years by 2050.

Projections of birth rates, however, have shown a sustained drastic decline, falling from an average of six births per woman to slightly below two over the rest of the century. Meanwhile, forecasts for the percentage of deaths by age cohort point to a reduction in the proportion of premature deaths, leading to an increasing proportion of the population reaching older ages (see Chart 1.2-c).

Lastly, as illustrated in the updated data presented in Chart 1.2-d, this combination of
factors foreshadows a progressive aging of the region’s population throughout this century, giving rise to constrictive population pyramids toward the middle of the century, which are then set to converge toward stationary pyramids.

Chart 1.2-b
Latin America: fertility rate and life expectancy at birth, 1950-2100

Chart 1.2-c
Latin America: percentage of deaths by age cohort, 1950-2100
Chart 1.2-d
Latin America: changes in the population pyramid, 1950-2100.

Source: MAPFRE Economic Research (updated using UN data)
2. The Latin American insurance market in 2018

2.1 Insurance market performance

Growth

In 2018, total premiums in Latin America amounted to 150,593 million dollars, of which 55.4% came from Non-Life insurance and the remaining 44.6% from Life insurance. Although the global share of the Latin American insurance market fell by 0.26 percentage points (pp) between 2017 and 2018, from a long-term perspective this share has been increasing steadily in both the Life and Non-Life segments. Whereas in 1980 this share was only 1.9%, by 2018 it had risen to 3.1%; 2.5% in the Life segment and 3.9% in the Non-Life segment (see Charts 2.1-a and 2.1-b).

It is worth repeating that the trend toward an increase in the share of the Latin American insurance market in the global market has been interrupted only during the periods of economic and financial crises that have affected the region, amplified by the Latin American currency...
devaluations that typically accompany such cyclical events. Against the backdrop of the positive performance of 2017, in 2018 the Latin American insurance industry once again suffered the consequences of the impact of currency depreciation against the dollar as a result of the process of monetary normalization carried out by the United States Federal Reserve during the period, which raised the benchmark interest rate for monetary policy on four occasions, together with a series of structural weaknesses that have led to an amplification of the impact on some of the region’s economies.

The economic slowdown experienced by Latin America in 2018, together with the currency depreciation sustained against the dollar by several of the region’s currencies, has been reflected in the performance of premiums in the Latin American insurance market, which, in aggregate terms, fell by 5.5% (compared to a growth of 8.6% experienced in 2017). The Non-Life insurance segment made a slightly smaller negative contribution to the drop in business, with -2.2 percentage points, with the Life business making a contribution of -3.3 percentage points. This contrasts with the situation observed the previous year in which the contribution to growth in both the Life and Non-Life segments was positive (see Chart 2.1-c).

![Chart 2.1-c](Latin America: contribution to insurance market growth, 2008-2018 (percentage points, pp))

The greater contribution to the drop coming from Life business was influenced by the impact that interest rates and the slowdown in the economy had on premiums for traditional savings products and Life annuities in the Brazilian market, which has a significant weight in the region as a whole, falling -4.2% in nominal terms on the previous year. However, when measuring growth in insurance activity in local currency for each of the markets under analysis, many registered positive premium growth both in local currency and in real terms. Even so, there are exceptions such as Guatemala, Argentina, Brazil, Uruguay, and Venezuela (see Chart 2.1-d and Table 2.1-a).

Moreover, despite the economic environment facing the region, as illustrated in Table 2.1-b, the vast majority of insurance markets in the region experienced growth in premium volumes, when measured in dollars, with only Argentina, Brazil, Uruguay, and Venezuela suffering...
setbacks, countries whose respective currencies suffered the greatest depreciations. In the other countries of the region, performance has been positive, although relatively uneven. Mexico and Colombia, which experienced growth, although they suffered a certain slowdown with respect to the previous year, compared to other markets (such as Peru or Chile), which experienced notable growth in line with the strong performance of their respective economies. The growth registered in the Dominican Republic, Bolivia, Puerto Rico, Panama, and El Salvador is also worth noting.

**Premiums by line of business**

Premiums in the Life insurance segment in Latin America fell by 7.2% in dollar terms (compared to growth of 8.9% in 2017), while premiums in the Non-Life segment fell by 4.0% (compared to growth of 8.2% in 2017). As stated above, the depreciation of the average exchange rate of the Argentine peso and the Brazilian real in 2018 (69.8% and 14.4%, respectively) explain these setbacks to a significant degree, together with the considerable fall in Life business lines in Brazil, again in local currency (see Table 2.1-b).

For the Non-Life segment in the region, most of the business sectors that comprise this line of business reported negative growth. The Automobile sector, which represents 18.7% of total premiums, contracted by 7.4%, in contrast to the 9.3% growth experienced in 2017. In the Life insurance segment, premiums for individual and group Life insurance fell, but those for

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**Chart 2.1-d**

Latin America: premiums and real insurance market growth, 2018
(billions of USD; real growth in local currency, %)

<table>
<thead>
<tr>
<th>Country</th>
<th>Premiums in 2018</th>
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</table>

Source: MAPFRE Economic Research (with data from supervisory bodies in the region)
Pension insurance grew. Individual and group life insurance, which represent 38.3% of total premiums, fell by 9.1%, which can largely be explained by the fall in this line of business in Brazil (see Table 2.1-c)

### Results and profitability

The composition of income statements for Latin American insurance markets in 2018 is shown in Table 2.1-d. As can be seen, all countries posted positive aggregate net results. The consolidated net result of the Latin American insurance market (excluding figures for Panama, which were unavailable) amounted to 12,064.2 million dollars in 2018 (8,884.4 million dollars in 2017), up 35.8% year on year (see Table 2.1-e). This data also shows that profits in dollars were down year on year in Bolivia (46.5%), Chile (17%), Colombia (8.6%), Ecuador (27.3), Mexico (1.1%), Puerto Rico (59.6), and Uruguay (75.4%), while all the other countries reported growth.

Turning to profitability measures, Table 2.1-f shows the return on equity (ROE) and return on assets (ROA) across the different insurance markets in the region. Argentina (28.6%), Dominican Republic (24.7%), Nicaragua (24%), Guatemala (22.9%), Brazil (22.3%), Mexico (22.1%), Honduras (21.4%) and Paraguay (17.3%) posted the highest ROE ratios. By contrast, the insurance markets of El Salvador (9.2%), Ecuador (8.3%), Costa Rica (7.1%), Puerto Rico (5.4%), Uruguay (2.8%), and Venezuela (1.4%) recorded the lowest ratios; in the case of the latter, amid six-digit inflation.
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Capitalization levels

Chart 2.1.-e shows the aggregate capitalization level of the insurance industries in each Latin American country, measured as shareholders’ equity over total assets.

In general, and as has been pointed out in previous reports\(^5\), relatively smaller markets show higher levels of capitalization, while capitalization levels are lower in the relatively more developed markets in the region (Mexico, Chile and Brazil). The case of Venezuela stands out again (the market with the highest capitalization on this metric), where a large part of the equity we are considering relates to unrealized gains on real estate investments and other financial instruments, and where the average inflation rate suffered unprecedented depreciation in 2018. Table 2.1-f compares capitalization levels (equity/assets) with two profitability indicators: return on equity (ROE) and return on assets (ROA).

Market concentration

In 2018, the Latin American insurance markets with the highest levels of concentration were Costa Rica, Uruguay, Nicaragua, and Peru, with a Herfindahl index above the threshold associated with a highly-concentrated industry (HHI>1800). Meanwhile, Peru, Honduras, Guatemala, the Dominican Republic, Panama, and Bolivia achieved values equating to markets with a moderate level of concentration (1000<HHI<1800). The other remaining Latin American markets reported indexes below 1000 points, i.e. below the threshold associated with moderate levels of concentration. It is worth remembering that by measuring the concentration level of an industry, we can get an overview of competition levels in a market. In general terms, therefore, the lower the concentration, the greater the current competitive incentive and, as a result, a further stimulating factor for market development.

Table 2.1-c
Latin America: premium volume by insurance line*, 2018 (premiums, millions of USD)

<table>
<thead>
<tr>
<th>Lines</th>
<th>2017</th>
<th>2018</th>
<th>Growth (%)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life</td>
<td>72,342</td>
<td>67,131</td>
<td>-7.2%</td>
<td>44.7</td>
</tr>
<tr>
<td>Life - Group and individual</td>
<td>63,214</td>
<td>57,466</td>
<td>-9.1%</td>
<td>38.3</td>
</tr>
<tr>
<td>Life - Social protection and/or</td>
<td>9,128</td>
<td>9,664</td>
<td>5.9%</td>
<td>6.4</td>
</tr>
<tr>
<td>Non-Life</td>
<td>85,926</td>
<td>83,083</td>
<td>-3.3%</td>
<td>55.3</td>
</tr>
<tr>
<td>Workplace accidents</td>
<td>7,121</td>
<td>5,568</td>
<td>-21.8%</td>
<td>3.7</td>
</tr>
<tr>
<td>Personal accident</td>
<td>4,352</td>
<td>4,262</td>
<td>-2.1%</td>
<td>2.8</td>
</tr>
<tr>
<td>Automobile</td>
<td>30,393</td>
<td>28,156</td>
<td>-7.4%</td>
<td>18.7</td>
</tr>
<tr>
<td>Credit and/or surety</td>
<td>2,234</td>
<td>2,199</td>
<td>-1.5%</td>
<td>1.5</td>
</tr>
<tr>
<td>Fire and/or allied lines</td>
<td>7,685</td>
<td>8,003</td>
<td>4.1%</td>
<td>5.3</td>
</tr>
<tr>
<td>Other damage</td>
<td>12,129</td>
<td>11,860</td>
<td>-2.2%</td>
<td>7.9</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>2,290</td>
<td>2,321</td>
<td>1.4%</td>
<td>1.5</td>
</tr>
<tr>
<td>Health</td>
<td>16,607</td>
<td>17,803</td>
<td>7.2%</td>
<td>11.9</td>
</tr>
<tr>
<td>Transport</td>
<td>3,116</td>
<td>2,912</td>
<td>-6.6%</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>158,268</td>
<td>150,214</td>
<td>-5.1%</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from supervisory bodies in the region)

*Note: It is important to note that this table does not take into account the Venezuelan insurance market because the breakdown by business lines is not available, and therefore the growth of the Life and Non-Life segments may show variations with respect to the aggregate growth data for the region indicated in the text of the report.
A further measure of the industry concentration process is the market share of the top five largest insurers (CR5), which confirms the existence of the concentration levels described based on the Herfindahl index (see Chart 2.1-f).

### 2.2 Structural trends

#### Penetration, density and depth

Chart 2.2-a presents structural trends in the Latin American insurance industry analyzed as a whole over the 2008-2018 period\(^6\). The penetration index (premiums/GDP) of the sector stood at 2.9% in 2018, unchanged on the previous year. The indicator also remains unchanged in both the Life (1.3%) and Non-Life (1.6%) segments.

Puerto Rico continues to report the highest penetration and density (premiums per capita) indexes in the region, reaching 13.4% and 4,586 dollars respectively in 2018. This is because Puerto Rican premium volume includes Health insurance for the poorest populations, which are
### Table 2.1-e
Latin America: net result by country, 2018
(millions of USD)

<table>
<thead>
<tr>
<th>Country</th>
<th>2017</th>
<th>2018</th>
<th>Growth 2017–2018 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1,000.1</td>
<td>1,663.7</td>
<td>66.3</td>
</tr>
<tr>
<td>Bolivia</td>
<td>66.7</td>
<td>35.7</td>
<td>-46.5</td>
</tr>
<tr>
<td>Brazil</td>
<td>2,503.4</td>
<td>5,150.6</td>
<td>105.7</td>
</tr>
<tr>
<td>Chile</td>
<td>959.7</td>
<td>796.8</td>
<td>-17.0</td>
</tr>
<tr>
<td>Colombia</td>
<td>610.9</td>
<td>571.8</td>
<td>-6.4</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>124.8</td>
<td>125.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Ecuador</td>
<td>70.1</td>
<td>51.0</td>
<td>-27.3</td>
</tr>
<tr>
<td>El Salvador¹</td>
<td>35.2</td>
<td>36.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>102.8</td>
<td>118.3</td>
<td>15.1</td>
</tr>
<tr>
<td>Honduras</td>
<td>45.9</td>
<td>51.5</td>
<td>12.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>2,495.6</td>
<td>2,468.0</td>
<td>-1.1</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>31.4</td>
<td>33.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Panama²</td>
<td>171.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Paraguay</td>
<td>30.2</td>
<td>43.0</td>
<td>42.3</td>
</tr>
<tr>
<td>Peru</td>
<td>257.4</td>
<td>319.8</td>
<td>24.2</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>337.8</td>
<td>137.2</td>
<td>-59.4</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>69.5</td>
<td>102.0</td>
<td>46.8</td>
</tr>
<tr>
<td>Uruguay</td>
<td>75.9</td>
<td>18.7</td>
<td>-75.4</td>
</tr>
<tr>
<td>Venezuela</td>
<td>66.8</td>
<td>341.6</td>
<td>411.3</td>
</tr>
<tr>
<td>Total</td>
<td>8,884.4</td>
<td>12,064.2</td>
<td>35.8</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from supervisory bodies in the region)

¹/ Data for El Salvador reflect the result before taxes.
²/ Data for Panama in 2018 not included due to lack of available information.

### Table 2.1-f
Latin America: profitability by country, 2018
(in local currency)

<table>
<thead>
<tr>
<th>Country</th>
<th>Equity/assets</th>
<th>ROE</th>
<th>ROA</th>
<th>Average inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>22.5%</td>
<td>28.6%</td>
<td>6.4%</td>
<td>34.3%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>29.1%</td>
<td>11.5%</td>
<td>3.4%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Brazil</td>
<td>7.7%</td>
<td>22.3%</td>
<td>1.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Chile</td>
<td>9.6%</td>
<td>11.2%</td>
<td>1.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Colombia</td>
<td>17.3%</td>
<td>12.7%</td>
<td>2.2%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>42.2%</td>
<td>7.1%</td>
<td>3.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>28.6%</td>
<td>8.3%</td>
<td>2.4%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>El Salvador¹</td>
<td>44.4%</td>
<td>9.2%</td>
<td>4.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Guatemala</td>
<td>36.5%</td>
<td>22.9%</td>
<td>8.4%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Honduras</td>
<td>35.2%</td>
<td>21.4%</td>
<td>7.5%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Mexico</td>
<td>13.9%</td>
<td>22.1%</td>
<td>3.1%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>36.3%</td>
<td>24.0%</td>
<td>8.7%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Panama¹</td>
<td>41.5%</td>
<td>13.0%</td>
<td>5.4%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Paraguay</td>
<td>38.0%</td>
<td>17.3%</td>
<td>6.6%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Peru</td>
<td>14.7%</td>
<td>14.6%</td>
<td>2.2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>26.7%</td>
<td>5.4%</td>
<td>1.4%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>28.4%</td>
<td>24.7%</td>
<td>7.0%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Uruguay</td>
<td>12.4%</td>
<td>2.8%</td>
<td>0.4%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Venezuela¹</td>
<td>85.5%</td>
<td>1.4%</td>
<td>1.2%</td>
<td>929,790%</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from supervisory bodies in the region)

¹/ Data for Panama and Venezuela relate to 2017.
THE LATIN AMERICAN INSURANCE MARKET IN 2018

managed by the private insurance industry but covered by the government’s budget (see Chart 2.2-b). Puerto Rico, Chile (4.6%), Brazil (3.1%), Colombia (2.8%) and Argentina (2.7%) were the countries that reported the highest values for penetration indexes in 2018. The markets that managed to improve their score under this indicator in 2018 were Puerto Rico, El Salvador, Peru, the Dominican Republic, and Nicaragua. Chile, Honduras, Panama, Mexico, Bolivia, Ecuador, Guatemala, and Costa Rica maintained almost the same index as in 2017. All other remaining countries reported a reduction in their index over the previous year’s measurement (Colombia, Venezuela, Brazil, Uruguay, Argentina, and Paraguay).

From a medium-term perspective, an analysis of the changes in this indicator since 2008 shows that there has been an increase of 0.6 percentage points, confirming for yet another year the growing trend we have seen over the last ten years, with the growth of the Life insurance segment making the biggest contribution and Non-Life insurance player a smaller role. As a result, total penetration in the region has risen by 24.4% over the last ten years.

Source: MAPFRE Economic Research (with data from supervisory bodies in the region)
* Data for Panama and Venezuela relate to 2017; latest available data.
Chart 2.2-a
Latin America: changes in penetration, density and depth, 2008-2018
(premiums/GDP, %; premiums per capita, USD; Life insurance premiums/total premiums, %, 2008 index=100)

Source: MAPFRE Economic Research (based on data from supervisory bodies)
The cumulative increase in penetration in the Life insurance segment came to 53.1%, while the cumulative increase in Non-Life insurance was 8.1% over the same period. These growth figures, while undeniably significant, still fall somewhat short of the figures reported for the decade 2007-2017.

Meanwhile, the density indicator (premiums per capita in dollars), stood at 246.6 dollars, down 6.4% on the previous year’s level, largely due to the depreciation of some local currencies against the dollar, mainly the Brazilian real and the Argentine peso, although the fall in the Brazilian Life insurance market also contributed. The bulk of insurance spending per person remains focused on the Non-Life segment (136.7 dollars), which was down 4.9% year on year. Life insurance density amounted to 109.9 dollars, down -8.1% on 2017.

Between 2008 and 2018, density grew in the region by 33.4%. The cumulative increase in the Life insurance market over the period amounted to 64.2% (rising from 67 to 109.9 dollars), while cumulative growth in Non-Life insurance was 15.9% (from 117.9 to 136.7 dollars). As was also the case with the penetration index over the 2008-2018 period, the density index also shows a certain growth slowdown when compared with the 2007-2017 period. Notwithstanding the above, an individual analysis of each of the markets considered in this report points to a trend toward increasing density over recent years when measured on a local currency basis.

Lastly, the index of insurance depth for 2018 Life insurance premiums relative to total premiums) stood at 44.6%, 0.8 percentage points down on 2017, and was strongly influenced by the performance of the Life insurance segment in the Brazilian market. On a medium-term horizon...
(2008-2018), the indicator registered an improvement, with a cumulative increase of 8.4 percentage points and cumulative growth of 23.1% over that period.

**Estimation of the Insurance Protection Gap**

A widely accepted definition of the Insurance Protection Gap (IPG) is the difference between the insurance coverage that is economically necessary and beneficial to society and the amount of coverage that is actually acquired. Estimating the IPG not only helps to determine the gap in terms of societal under-insurance, but also the potential market for insurance, which is the market size that could be achieved were the gap eradicated.

The IPG in the Latin American insurance market is estimated at 254.3 billion dollars for 2018, down 1.9% from the previous year’s estimate. There have been no major changes in the structure of the IPG over the last ten years relative to our previous report, confirming that the bulk of the gap lies in Life insurance. As a result, in 2018, 62.3% of the IPG related to Life insurance (158.4 billion dollars), while Non-Life insurance accounted for 37.7% of the gap, equivalent to 95.9 billion dollars (see Chart 2.2-c). Thus, the potential insurance market in Latin America in 2018 [the sum of the actual insurance market plus the IPG] stood at 404.9 billion dollars, 2.7 times larger than the current regional market (150.6 billion dollars).

Another way of analyzing the insurance gap in relative terms is to present it as a multiple of the actual market, as illustrated in Chart 2.2-d. As can be seen, the insurance gap in the period between 2008 and 2018 shows a downward trend, both for the total market and in terms of the Life and Non-Life segments. Thus, while in 2008 the IPG was 2.5 times the actual insurance market in the region, by 2018 it had narrowed to 1.7 times. Similarly, in the Life insurance segment the multiple fell from 4.8 to 2.4, while the Non-Life insurance multiple saw a more modest reduction from 1.3 to 1.1 over the period.

Chart 2.2-e shows the wider change in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Latin American insurance market over the last ten years, comparing the situation in 2018 with the state of the market in 2008. During this period, there was an improvement in the total market gap thanks largely to the reduction in the IPG.
within the Life segment (the least developed segment in the region), while the insurance protection gap in the Non-Life segment as a multiple of the actual market saw a more moderate reduction.

The structure of the IPG for each of the countries in the region and the size of the insurance gap with respect to the total current market are shown in Chart 2.2-f. An analysis of this information shows both that the development of insurance markets and their structural trends can be related to the degree of balance of the current IPG, which can be used to identify areas of underdevelopment. Likewise, the degree of progress in market development is linked to the ratio of the insurance gap to the current market. The following section of this report goes into more detail by addressing the individual IPGs for each Latin American market.

Finally, following the line of analysis of our previous reports, Chart 2.2-g offers an assessment of the capacity of the Latin American insurance industry to close the insurance gap. We have conducted a comparative analysis of the growth rates observed over the 2008-2018 period relative to the growth rates that would be required to close the 2018 IPG over the next ten years. Chart 2.2-g shows that over the period under analysis, the region’s insurance market posted annual average growth (in dollars) of 4%, underpinned by average growth of 6.2% in the Life insurance segment and 2.6% in the Non-Life segment; a growth dynamic that has slowed with respect to the 2007-2017 period, which experienced growth of 6.4%, 8.7% and 4.8%, respectively.
Chart 2.2-f
Latin America: structure and relative size of the Insurance Protection Gap, 2018
(structure, %; IPG as a proportion of total market, number of times)

Source: MAPFRE Economic Research (with data from supervisory bodies in the region)

Chart 2.2-g
Latin America: capacity to close the IPG, 2008-2018
(annual growth rate, %; sufficiency or insufficiency, pp)

Source: MAPFRE Economic Research
Accordingly, if this same growth dynamic observed over the 2008-2018 period were to continue over the next ten years, the market growth rate would fall short of covering the 2018 IPG by 6.4 percentage points. The same is true when analyzing either the Life insurance segment (short 6.7 percentage points) or the Non-Life Insurance segment (short 5.4 percentage points), with the situation having deteriorated compared with the measurement taken in 2017.

**Market Development Index (MDI)**

Lastly, Chart 2.2-h provides an estimate of the Market Development Index (MDI) for the Latin American insurance industry. For the region as a whole, the MDI has shown a sustained improvement over the last ten years, despite suffering a slight dip in 2014, and again in 2018. Despite these two setbacks, this clear positive trend in the industry over the 2008-2018 period provides further proof that the Latin American insurance market has been experiencing positive and well-balanced growth, when analyzed over the medium-term.

**Summary of M&A activity**

The growth posted by insurance groups operating in Latin America in 2018 was mainly organic, since with the exception of Zurich (which acquired QBE in Argentina, Brazil, Ecuador, Colombia, and Mexico, and whose Chilean subsidiary acquired the Life portfolio of Euroamerical, the rest of the groups operating in the region did not register any significant M&A activity in 2018. Shown below are some of the main events relating to M&A activity in 2018:

- In addition to the aforementioned agreement entered into by Zurich Insurance Group to acquire the operations of the Australian insurance company QBE Insurance Group Limited in Latin America, in July 2018 in Argentina, the Superintendency of Insurance confirmed the corporate name change and the consequent reform of the Bylaws of Asociart RC Seguros S.A., an entity that will henceforth be called lúnigo Argentina Compañía de Seguros S.A. It should be noted that this 100% digital company of Grupo San Cristóbal will expand the field of activity in which lúnigo (automotive industry) will work.
• In March 2018, the Superintendence of Private Insurance of Brazil (SUSEP) authorized Youse Aseguradora (now owned by Caixa Seguros) to operate in casualty and personal lines insurance, but this company may not engage in insurance operations until its financial statements have been approved. The agreement reached in June 2018 between MAPFRE and Banco do Brasil to update and renew their partnership was a relevant matter for the year. According to the terms of the agreement, MAPFRE now owns 100% (it previously controlled 50%) of BB MAPFRE’s Non-Life business, as well as the Life business for products distributed through the agency channel.

• Unibienes Seguros and Reaseguros Patrimoniales, a state-owned insurance company registered in November 2017, entered the Bolivian insurance market in 2018 providing coverage for general P&C insurance, health insurance, and fidelity insurance, among others.

• In July 2018, BBVA terminated the sale of its investment in Banco Bilbao Vizcaya Argentaria, Chile (BBVA Chile) to the Bank of Nova Scotia, as well as the other group companies in Chile involved in the banking business (including BBVA Seguros Vida).

• Grupo Financiero Ficohsa, the main shareholder of Ficohsa Seguros through its subsidiary Interamericana Holding Group, has consolidated its position in Central America with the acquisition of 100% of the shares of Seguros Alianza, S.A., a Guatemalan financial insurance provider since 1971. The process was authorized by the Superintendency of Banks of Guatemala and the Banking Superintendency of Panama. The insurance company operates in Honduras, Guatemala, Panama, and Nicaragua.

• In 2018, the South African insurance, pension, and asset management conglomerate Old Mutual sold its Latin American subsidiaries to the Asian company Cmig International and renamed it Skandia.

Individual analysis of the Latin American insurance markets

The next section of this report provides a detailed analysis for each of the Latin American insurance markets. As in previous reports, these individual reports begin with an initial assessment of the macroeconomic backdrop in each country in 2018, before turning to the main metrics and trends in their insurance markets. Broadly speaking, these individual reports provide a perspective for the 2008-2018 period on premium growth, the main items of the combined balance sheet at sector level, technical performance and the results and profitability of the insurance industry.

It also includes a review of the main structural trends in each market, analyzing developments in insurance penetration, density and depth. In order to appropriately portray the dynamics underlying the main trends in each market, the country analysis uses local currency so as to avoid the distorting effects of currency fluctuations. Furthermore, each of the individual reports includes an estimate of the IPG, in terms of both its magnitude and structure.
3. The Latin American insurance markets: country analysis

3.1 North America, Central America and the Caribbean

3.1.1 Mexico

Macroeconomic environment

The Mexican economy grew 2% in 2018 (2.1% in 2017), continuing on the path of decreased economic dynamism in its levels of activity. It should be noted that this slowdown is somewhat more pronounced when seasonally adjusted growth data are taken into account. Reconstruction efforts following the impact of natural disasters in 2017 and increased economic dynamism in the external sector (due to the strong economic performance of the United States) made it possible to offset the effects of the restrictive monetary policy implemented by the central bank during the year, in order to control inflation and the depreciation of the exchange rate (see Chart 3.1.1-a).

Exports were the main growth driver of the Mexican economy in 2018. Private consumption slowed down somewhat, while on the supply side the tertiary sector was the most dynamic segment of the economy, with growth of around 2.8% on average since September, followed by the primary sector, where growth surpassed 2%, while the secondary sector grew 0.5%.

The fiscal deficit of the public sector worsened to 2% of GDP (versus 1.1% in 2017), while the current account deficit came to 1.7% of GDP at year-end, on par with the previous year. The nation’s debt to GDP stood at 46.8% (versus 46.9% in 2017), 2.7 percentage points lower than in 2016, when it reached its highest peak since 1990.

In 2018, the risk rating agencies (Fitch Ratings, Standard & Poor’s and Moody’s) maintained their investment grade ratings for Mexico’s government debt. However, in October, Fitch Ratings changed its outlook on the Mexican state-guaranteed debt from stable to negative, due to increased uncertainty as a result of the change of government and the new policies implemented, as well as the increase in

![Chart 3.1.1-a](image-url)
Petróleos Mexicanos (PEMEX) liabilities. In 2019, Standard & Poor’s and Moody’s followed the same line, changing their outlook from stable to negative in March and June, respectively; Fitch lowered its rating from BBB+ to BBB in June, with a stable outlook.

Meanwhile, average inflation stood at 4.9% in 2018, thanks to the restrictive monetary policy implemented by the Bank of Mexico, significantly lower than the 6% reported for the previous year. This policy also had a positive effect on real wages. However, despite the progress made, the year-end inflation rate was above the objective set by the central bank (between 3% and 4%), which resulted in the continuation of restrictive monetary conditions in the first half of 2019. The unemployment rate stood at 3.3% (3.4% in 2017).

Turning to the exchange rate, from January to November, 2018, the nominal depreciation of the peso was 2.3% (a real appreciation of 0.9%) relative to the year-end 2017, although in the last two months of 2018 it once again suffered a period of volatility, which was reversed in the first half of 2019.

For 2019, MAPFRE Economic Research estimates growth of 1.3% for the Mexican economy, in line with the global slowdown in activity levels forecast for this year. The Economic Commission for Latin America and the Caribbean (ECLAC) estimates a 1.0% growth in economic activity, associated with a fall in investment and weak public and private consumption, while the International Monetary Fund (IMF) puts it at 0.9%.

**Insurance market**

**Growth**

The Mexican insurance market achieved a premium volume of 523,9 billion pesos (27.25 billion dollars) in 2018, revealing nominal growth of 8.2% and real growth of 3.1% (see Table 3.1.1 and Chart 3.1.1-b). A total of 46% of premiums relate to Life and Pension insurance, with the remaining 54% in Non-Life insurance. Market growth in 2018 (8.2%) was aided by a larger contribution from the Life insurance segment at 5.8 percentage points, while Non-Life insurance contributed 2.4 percentage points (see Chart 3.1.1-c). It should be noted...
that Non-Life insurance was not covered by PEMEX's multi-year policy in 2018, which was renewed for a two-year period in 2017 and is expected to have a positive effect again in 2019.

An analysis of the main market segments shows that premiums on Life insurance grew 13% in nominal terms (7.7% in real terms) to reach 242.82 billion pesos (12.63 billion dollars). Individual Life insurance, which represents 60% of Life insurance, grew the most (16% in nominal terms and 10.6% in real terms) to 144.91 billion pesos (7.54 billion dollars). Other Life business (group and pension insurance) also registered growth in real and nominal terms throughout 2018.

Non-Life insurance premiums rose by 4.3% in nominal terms in 2018 (-0.5% in real terms) to 281.09 billion pesos (14.62 billion dollars). In this market segment, all insurance modalities grew in nominal terms, with the sole exception of Fire, Transport, and Third-Party Liability. The two most important Non-Life lines stand out, (Automobile and Health)
Growing by 7.1% and 11.8% in nominal terms, respectively.

**Balance sheet and equity**

Chart 3.1.1-d shows developments in the overall balance sheet of the Mexican insurance market at sector level for the period 2008-2018. This information shows that the Mexican insurance industry had total assets of 1.55 trillion pesos (78.91 billion dollars) in 2018, while equity stood at 215 billion pesos (10.94 billion dollars), up 6.8 percentage points on 2017.

**Investment**

Developments in total investments in the Mexican insurance industry over the 2008-2018 period are presented in Chart 3.1.1-e, while Charts 3.1.1-f and 3.1.1-g provide a breakdown of the aggregate investment portfolio at sector level over the period. From this information we can see that total investment came to 1.2 trillion pesos (60.85 billion dollars) in 2018, showing a similar distribution to 2017, i.e. concentrated in fixed income investments (81.5%), with a significantly smaller proportion (13.7%) in equity instruments.

As stated in our previous year’s report, sovereign debt maintains its high weighting in 2018 as the result of the ongoing process of implementing the new Solvency II-style prudential regulation in Mexico, which favors the matching of assets and liabilities and, therefore, the use of debt instruments.
However, there was a slight increase in the weighting of equity investments, which accounted for 13.7% of total investments in 2018 (12.1% in 2017). Meanwhile, the weighting of fixed income securities fell slightly to 81.5% (82.8% in 2017).

**Technical provisions**

Chart 3.1.1-h shows changes in technical provisions in the Mexican insurance industry over the 2008-2018 period. As can be seen, total technical provisions amounted to 1.2 trillion pesos (60.88 billion dollars) in 2018. Meanwhile, and as shown in Charts 3.1.1-i and 3.1.1-j, 69.2% of total technical provisions related to Life insurance, 12.7% to provisions for unearned premiums and unexpired risks in Non-Life insurance, 12.1% to technical outstanding loss provisions, 3.5% to catastrophe reserves and 2.4% to other technical provisions in 2018.
Over the 2008-2018 period, the tendency to increase the relative weighting of Life insurance provisions in the total continued, rising from 64.3% in 2008 to 69.2% in 2018, which is evidence of the growing development of the Life insurance segment in the Mexican market. Similarly, and accordingly, the share of other provisions fell slightly over the period.

### Technical performance

Chart 3.1.1-k shows developments in the Mexican insurance industry’s technical performance over the 2008-2018 period. Based on this information, the total combined ratio (calculated relative to net earned premium) stood at 102.8% in 2018, showing an improvement of 5.2 percentage points on the figure reported in 2017 (108%). It should be noted that the change in the indicator in 2018 was down to the impact of the decrease in the loss ratio between 2017 and 2018 (3.7 percentage points).

### Results and profitability

The Mexican insurance industry posted a consolidated net result of 47.44 billion pesos (2.478 billion dollars) in 2018, up 0.5% on the previous year, largely due to the fact that the outstanding financial result for 2017 could not be matched.

It is important to note that the Mexican market has regained the downward trend of the loss ratio from its peak level in 2009, which had been halted in 2017. Similarly, we can see the continuation of the improvement shown in the combined ratio over recent years, which reached its lowest level in 2011. In addition, the
financial result (as a percentage of the net earned premium) stood at 21.1% in 2018, i.e. 5.4 percentage points below the level reached the previous year (see Chart 3.1.1-l).

As for profitability, the Mexican insurance industry achieved a return on equity (ROE) of 22.1% in 2018, down 1.4 percentage points from 2017. In a similar vein, return on assets (ROA) reached 3.1% in 2018, showing a slight decrease of 0.2 percentage points from the value of the indicator in 2017.

Insurance penetration, density and depth

Chart 3.1.1-m shows the main structural trends shaping the development of the insurance industry in Mexico over the 2008-2018 period. The penetration index (premiums/GDP)
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Chart 3.1.1-m
Mexico: changes in penetration, density and depth, 2008-2018
(premiums/GDP, %; premiums per capita, pesos and USD; Life insurance premiums/total premiums, %; index 2008=100)

Source: MAPFRE Economic Research (with data from the National Insurance and Bonding Commission)
remained at 2.2% in 2018, an all time high for the Mexican insurance industry. It is worth noting that this indicator has generally been on an upward trend over the 2008-2018 period, in line with the general pattern seen across the wider Latin American region. Nonetheless, the penetration of the Mexican market remains below the absolute average level for Latin America (2.9%).

Insurance density in 2018 (premiums per capita) amounted to 4,151.7 pesos (216 dollars), up 7% on 2017 (3,881 pesos). As in the case of penetration, density has followed an upward path over the last ten years, with cumulative growth in local currency terms of 122.6%.

Lastly, depth (the ratio of Life insurance premiums to total premiums) stood at 46.3%, i.e. 2.0 percentage points higher than in 2017, in part due to the increase in the individual Life segment. In contrast to the trend observed through to 2016, the depth of the Mexican insurance market in 2017 fell short of the average for Latin American insurance markets. However, in 2018 the Mexican market is once again above average levels for the region.

Estimation of the Insurance Protection Gap

Chart 3.1.1-n provides an estimate of the Insurance Protection Gap (IPG) for the Mexican insurance market over the 2008-2018 period. This data shows that the insurance gap stood at 1.29 trillion pesos ($66.91 billion dollars) in 2018, equivalent to 2.5 times the size of the actual insurance market at the close of the same year. Life insurance is the key segment shaping the structure and performance of the IPG over the last ten years. In 2018, 60% of the IPG related to Life insurance, equivalent to 765.5 billion pesos. Meanwhile, Non-Life insurance accounted for 40% of the gap, amounting to 520.7 billion pesos. Accordingly, the potential insurance market in Mexico (the sum of the actual market plus the IPG) amounted to 1.81 trillion pesos ($94.16 billion dollars), i.e. 3.5 times the current size of the Mexican market, a figure similar to that included in our 2017 report.

Chart 3.1.1-o shows an estimate of the IPG as a multiple of the actual market in each year; this comparison provides an insight into how the gap has changed over time. As a multiple, the IPG has been on a clear downward trend in the Mexican market over the last ten years, whether looking at the overall market or at the Life and Non-Life segments. Thus, while in
2008 the IPG was 3.9 times the size of the real insurance market in Mexico, in 2018 this had been reduced to 2.5 times. The same holds true for the Life and Non-Life segments; in the case of the former, the multiple fell from 5.4 to 3.2, while for the latter it shrunk from 2.6 to 1.9 over the ten-year period.

Chart 3.1.1-p summarizes changes in the IPG as a multiple of the actual market for the Life and Non-Life segments and the total Mexican insurance market between 2008 and 2018, showing a clear improvement in the Non-Life business, especially in the Life business.

Chart 3.3.1-q shows a comparative analysis between the growth rates observed in the Mexican market (at the aggregate level, and in the Life and Non-Life segments) over the last ten years and the growth rates that would be required in order to close the IPG calculated for 2018 over the coming ten years. According to this analysis, during the 2008-2018 period the Mexican insurance market posted an average annual growth rate of 9.7%. This was underpinned by average growth of 10.1% in the Life insurance segment, and 9.4% in the Non-Life insurance segment. Were the same growth pattern to be maintained over the next ten years, the growth rate for the market as a whole would fall short of covering the IPG established in 2018 by 3.5 percentage points. This means that the Mexican insurance market would need to see average growth of 13.2% over the next ten years in order to close the IPG calculated for 2018. The same conclusions emerge from an individual analysis of the Life and Non-Life segments. The shortfall for Life insurance would be 5.2 percentage points, while for Non-Life insurance it would be just 1.6.
percentage points. To bridge these gaps, the Mexican insurance market would need to achieve annual average growth of 15.3% and 11.1%, respectively, over the next ten years.

As shown in Chart 3.3.1-q, this dynamic has hardly changed on the measurement taken in 2017 (-3.45 pp in 2018 vs. -3.51 pp in 2017), due to a mixed bag of results, as the shortfall was reduced in the case of Life insurance (from -5.96 to -5.19 percentage points), and increased slightly in the case of Non-Life insurance (from -1.1 to -1.6 pp).

**Market Development Index (MDI)**

Chart 3.1.1-r provides an estimate of the Market Development Index (MDI) for the Mexican insurance industry. The MDI aims to summarize trends in the evolution and maturity of insurance markets. In the case of the Mexican insurance market, the indicator performed positively over the last ten years, albeit falling slightly short of the average for the wider region. The indicator performed positively over all of the last ten years in the Mexican insurance market, except for 2010, 2014 and 2017.

**Comparative analysis of structural ratios**

Lastly, Chart 3.1.1-s outlines the state of the Mexican insurance market when compared with the average for Latin America, measured in terms of the various structural indicators featured in this report (penetration, density, depth and MDI). We can see from this chart that, while the depth and MDI of the Mexican insurance market are practically on par with average levels for the wider region, both penetration and density still fall short of the average levels.

**Insurance market rankings**

**Overall ranking**

At the close of 2018, the Mexican insurance industry consisted of 111 institutions. The top five insurers accounted for 44.4% of total premiums, down 1.3 percentage points on the
previous year. As indicated in previous reports, market concentration has generally tracked downward over the last ten years (albeit with a trend toward stagnation in the Life insurance segment), which has been interrupted at some points, such as 2018, as shown by the CR5 index. Overall, levels of competition in the Mexican insurance industry measured through the Herfindahl index are below the thresholds associated with potential competition problems (see Chart 3.1.1-t).

In 2018, the two leading insurance groups in Mexico were the same as the previous year. Grupo Nacional Provincial (12.7%) remains in first place and MetLife holds second place (11.8%). Axa, however, dropped out of third place with a market share of 7.1%, giving way to BBVA, which now occupies that position with 8.9%. Meanwhile, in addition to BBVA moving up three positions, Inbursa improved by one position (3.8%) and Chubb by two positions (3.6%); Axa (7.1%) and Quálitas (6.3%) fell by one and two positions, respectively, in the 2018 ranking (see Chart 3.1.1-u).

**Non-Life and Life rankings**

In the Non-Life segment, Grupo Nacional Provincial (GNP) topped the table with 12.7% of total premiums, followed by Quálitas (11.7%) and Axa (11.3%), all of which gained market share over the previous year. All other companies improved by one position, except Seguros Atlas (3.9%), which continued to rank tenth, and MAPFRE, which ranked ninth since it
lacked the contribution of PEMEX’s multi-year policy, which, despite being in force in 2018, recorded no premiums for the year.

As for the Life insurance segment, once again MetLife leads the market with a share of 20.5% (lower than the previous year), followed by BBVA which, with a 16.2% market share in 2018, has climbed two positions, relegating Grupo Nacional Provincial (GNP) to third position with 12.7%. Banamex (9.4%), Seguros Monterrey New York Life (8.4%) and Sura (1.4%) all fell one position from the previous year, while all others maintained their relative positions (see Chart 3.1.1-u).
Key Regulatory Aspects

From a regulatory perspective, various measures were implemented in 2018 to strengthen and consolidate the regulatory framework of the Mexican insurance market with respect to the solvency framework (Solvency II), which was established in 2015 under the new Insurance and Surety Institutions Law.

As such, 15 amendments were introduced to the Insurance and Bond Circular (CUSF) in 2018, the instrument that embodies the secondary and operational aspects of the regulatory framework in Mexico. The most relevant aspects were the following:

- **Strengthening of the regulatory framework for money laundering and financing of terrorism.** Requirements for the authorization and organization of institutions have been modified in accordance with international standards on money laundering and the financing of terrorist activities.
- **Strengthening of corporate governance.** Mechanisms established for the delivery of the approval and defining document of the corporate governance system, as well as various documentation relating to its operation.
- **Standardization of accounting criteria with Financial Reporting Standards (IFRS).** Adjustments have been made to the regulations in order to eliminate, as appropriate, the differences between IFRSs and accounting criteria on matters relating to insurance.
- **Updating of catalogs of first rate foreign insurance and reinsurance companies registered in the General Register of Foreign Reinsurers that met the requirements for renewal in the Registry for fiscal year 2019.**
- **Setting of requirements to be met by external auditors when issuing financial statements relating to financial groups.**

Source: MAPFRE Economic Research (with data from the National Insurance and Bonding Commission)
• Updating of claims rates paid to carry out the correct valuation of the existing surety bond reserve, statutory scenarios for the Dynamic Solvency Test, measuring interval value used for the calculation of asset-liability mismatch, as well as the establishment and updating of parameters and factors for the determination of the Solvency Capital Requirement.

Work continued in 2018 to shape and prepare the following regulation:
• Regulations for Insurance and Surety Agents.
• Regulations on the Inspection and Supervision of the National Insurance and Surety Commission.
• Rules on the establishment of mutual insurance companies.
• General provisions following the enactment of the Law on the Regulation of Financial Technology Institutions (Fintech Law).
• General provisions for strengthening institutional cybersecurity.

3.1.2 Guatemala

Macroeconomic environment

Guatemala’s economy grew 3.1%, in real terms in 2018, up from the value of 2.8% seen in 2017 (see Chart 3.1.2-a).

This accelerated growth in the level of economic activity was largely due to the strong performance of private consumption, buoyed by a better showing from remittances, employment, and, to a lesser extent, credit. The higher rate of public spending compared to 2017, the year in which the reforms to the Law on State Contracting designed to increase transparency in acquisitions came into force, also played a role in the slowdown in public investment the year before. By sector, virtually every sector improved with the exception of mining. The external sector, however, suffered an economic contraction due to a dip in the volume of exports. According to information from the Central American Monetary Council, the fiscal deficit of the Guatemalan central government stood at 1.7% of GDP in 2018 (1.3% in 2017) and total public debt reached 24.3% of GDP (24.7% in 2017).

Chart 3.1.2-a
Guatemala: changes in economic growth and inflation, 2008-2018
(GDP in local currency, billions of quetzales; real growth rate, %; annual inflation rate, %)

Source: MAPFRE Economic Research (based on IMF data)
Average inflation was 3.8% in 2018, down from 4.4% in the previous year, allowing the central bank to maintain an accommodative monetary policy. Meanwhile, unemployment remained at a similar level to the previous year, at around 2.7%.

ECLAC forecasts an economic growth of 2.9% for Guatemala by 2019, driven by increased private consumption, a moderate increase in public spending, and an improved showing from the external sector. The IMF estimates that the Guatemalan economy will post 3.5% growth in 2019.

Insurance market

Growth

The Guatemalan insurance market achieved premiums of 7.0 billion quetzales in 2018 (931 million dollars), representing nominal growth of 3% and real growth of -0.7%. Thus, the market is growing at a slower pace than in 2017, when it registered growth of 8% (see Chart 3.1.2-b).

Premiums were up 2.9% in the Non-Life segment (6.8% in 2017), reaching 5.54 billion quetzales (737 million dollars). This business accounts for 79.1% of the total market and the two most important lines of business (Healthcare and Automobile) both grew in nominal terms by 2.6% and 4.6%, respectively, which means that Healthcare fell by 1.2% and Automobile business grew 0.8% in real terms. Meanwhile, Life business posted a nominal growth of 3.1%, reaching 1.46 billion quetzales (194 million dollars), which stands in contrast to the significant growth seen in this business segment in 2017, of 11.5% (see Table 3.1.2).

As shown in Chart 3.1.2-c, 2.3 percentage points of the total 3% nominal growth reported for the Guatemalan insurance market in 2018 was generated by the Non-Life insurance segment, while the Life business contributed the remaining 0.7 percentage points. Thus, the balanced growth profile that has prevailed since 2013 continues, with positive contributions from both insurance businesses.

Balance sheet and equity

Chart 3.1.2-d shows developments in the overall balance sheet at sector level of the Guatemalan insurance industry over the 2008-2018 period. The Guatemalan insurance industry had total assets of 10.64 billion quetzales in 2018.
The Latin American Insurance Market in 2018

Quetzales (1.38 billion dollars) in 2018, while equity stood at 3.88 billion quetzales (503 million dollars), up 8.1 percentage points on the value registered in 2017. At the end of 2018, the aggregate capitalization level of the Guatemalan insurance industry (measured in relation to total assets) was 36.5%.

Investment

Charts 3.1.2-e, 3.1.2-f and 3.1.2-g show changes in investment in the Guatemalan insurance market over the 2008-2018 horizon, as well as the composition of the aggregate investment portfolio at sector level over the period. Based on this data, in 2018 investments totaled 7.21 billion quetzales (934 million dollars), mainly in fixed income investments (60.6%). Other financial investments (mainly bank deposits) accounted for 29.2% of the portfolio in 2018. Debt instruments are therefore the most prevalent, with aggregate investment in equity playing only a minor role (1.8%), mirroring the situation in seen in the

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<th>Millions of US dollars</th>
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Source: MAPFRE Economic Research (using data from the Banking Superintendency)

1/ Net direct reinsurance premium

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Table 3.1.2
Guatemala: premium volume¹ by line of business, 2018

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Chart 3.1.2-c
Guatemala: contribution to insurance market growth, 2008-2018 (percentage points, pp)

Source: MAPFRE Economic Research (using data from the Banking Superintendency)
previous year. As stated in our 2017 report, an analysis of the investment portfolio increased over the last ten years shows the gradual increase of the weight of investments in public fixed income, climbing from 48% in 2008 to 60.6% in 2018 (Charts 3.1.2-f and 3.1.2-g). Meanwhile, the percentage of other financial investments (essentially bank deposits)
increased from 37.4% in 2008 to 41.2% in 2010; this trend has since reversed, with other financial investment gradually falling to reach 29.2% at the end of 2018.

Technical provisions

The evolution and relative composition of the Guatemalan insurance industry’s technical provisions over the 2008–2018 period are shown in Charts 3.1.2-h, 3.1.2-i and 3.1.2-j. In 2018, technical provisions amounted to 4.86 million quetzales (629.5 million dollars). Of these total technical provisions, 37.9% related to Life insurance, 29% to provisions for unearned premiums and unexpired risks in Non-Life insurance, 27.4% to outstanding loss provisions, 5.6% to provisions for catastrophic risks and 0.2% to other technical provisions.

The volume of technical provisions has seen sustained growth in absolute terms over the 2008–2018 both in Life and Non-Life insurance (interrupted only in 2017). Looking at the relative weight of Life insurance provisions to total technical provisions in the Guatemalan insurance market, we can observe a general decline over the last ten years, with the sharpest dips seen in 2010 and 2016 [Chart 3.1.2-i].

Technical performance

Chart 3.1.2-k shows the positive technical performance of the Guatemalan insurance industry over the ten years and shows a sustained upward trend, with the combined ratio falling to 88.2% in 2018 (3.9 pp less than the previous year).
This improvement came largely in response to the reduction in the loss ratio, along with a tighter expense ratio, which also fell 0.5% compared to the previous year.

**Results and profitability**

The Guatemalan insurance business posted a net result of 890 million quetzales (118 million dollars) in 2018, up 17.8% on the previous year, due to the healthy performance of the loss ratio.
and the industry’s financial result, which gained 11% on the figure reported in 2017 (see Chart 3.1.2-l). Thus, return on equity (ROE) came to 23%, up 1.9 percentage points on the value reported a year earlier. Return on assets (ROA) also fared well by gaining 8.4%, 0.8 percentage points above the level of the previous year’s indicator.

**Insurance penetration, density and depth**

Chart 3.1.2-m shows the performance of the main structural growth indicators for the Guatemalan insurance industry, as well as the pattern observed over the 2008-2018 period. Despite the positive growth seen across the country’s insurance industry, the penetration index (premiums/GDP) stood still at 1.2% in 2018.

Significantly, this indicator remained relatively stable over the 2008-2018 period, meaning that penetration in 2018 was barely 7.4% higher than the level reported back in 2008. As a result, the country’s penetration is well below the average for Latin American insurance markets, and it has gradually diverged over the last ten years relative to the rest of the countries in the region, where penetration rose by an average of 24.4%.

Meanwhile, insurance density (premiums per capita) amounted to 406 quetzales (54 dollars), 75.0% above the value observed in 2008 (232 quetzales). In contrast to penetration, density has increased over the last ten years, meaning that while per capita purchases of insurance have grown at a sustained rate [a very significant increase given the relatively small base], the pace of growth has been insufficient to enable insurance to gain a greater weight among total economic activity in the country.

Depth (relationship of Life insurance premiums to total premiums) stood at 20.9% in 2018, 0.1 percentage points above the value of the previous year, but 2.4 percentage points above the value reported in 2008. As with the penetration rate, the depth level of the Guatemalan insurance market is below the average for Latin America.
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Chart 3.1.2-m
Guatemala: changes in penetration, density and depth, 2008-2018
(premiums/GDP, %; premiums per capita, quetzales and US dollars; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (using data from the Banking Superintendency)
Estimation of the Insurance Protection Gap

Chart 3.1.2-n provides an estimate of the IPG for the Guatemalan insurance market over the 2008-2018. The IPG stood at 38,653 million quetzales (5,138 million dollars) in 2018, equivalent to 5.5 times the actual insurance market at the close of the same year.

As is the case for most other Latin American insurance markets, the structure and performance of the IPG are shaped mainly by the Life insurance segment. In 2018, 62% of the gap related to Life insurance (23,972 billion quetzales), while Non-Life insurance accounted for 38% of the IPG (14,682 million quetzales). The potential insurance market in Guatemala in 2018 (measured as the sum of the actual market plus the IPG), stood at 45,658 million quetzales (6,070 million dollars); i.e. 6.5 times the size of the current market.

Chart 3.1.2-o shows an estimate of the IPG as a multiple of the actual Guatemalan insurance market in each year of the period under analysis. The IPG (measured as a multiple) for the Guatemalan insurance market has been on
a gentle downward path over the 2008-2018 period, both in terms of the total market and the Life segment. While in 2008 the IPG was 6.4 times the size of the actual market, by 2018 that weight had fallen to 5.5 times. We find a similar situation in the Life segment, where the multiple fell from 22.6 to 16.4 times. However, the IPG has stagnated in relative terms in the Non-Life insurance segment, standing at 2.7 in 2008 and 2.6 in 2018.

Chart 3.1.2-p shows the change in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Guatemalan insurance market over the last ten years, comparing the situation in 2018 the state of the market in 2008. The chart shows a mild improvement in terms of the gap as a multiple of the actual market, mainly in the Life insurance segment.

Lastly, Chart 3.1.2-q provides an overview of the capacity of the Guatemalan insurance market to close the IPG calculated in 2018. To this end, a comparative analysis has been carried out between the growth rates observed in the market over the last ten years and the growth rates that would be needed in order to close the IPG calculated in 2018 over the coming ten years.

According to this analysis, the Guatemalan insurance market posted average annual growth of 8.0% over the 2008-2018 period; this was underpinned by average growth of 9.3% in the Life insurance segment and 7.7% in the Non-Life insurance segment. Were the same
The growth profile to be maintained over the next ten years, the growth rate for the market as a whole would fall short of the rate needed to cover the IPG established in 2018 by 12.6 percentage points; this means that the insurance market would need an average growth rate of 20.6% over the next ten years in order to close the estimated IPG for 2018.

The same is true of the Life and Non-Life segments. The shortfall for Life insurance would be 23.8 percentage points and 6.1 percentage points for Non-Life insurance. Thus, in order to bridge these two gaps the Guatemalan insurance market would need to achieve annual average growth of 33.1% and 13.8%, respectively, over the next ten years.

Lastly, comparative analysis between this fiscal year and 2017 for the Guatemalan insurance market reveals that the shortfalls for the total market and for the Non-Life and Life insurance segments have increased.

Market Development Index (MDI)

Chart 3.1.2-r provides an estimation of the Market Development Index (MDI) for the Guatemalan insurance industry over the 2005-2018 period. Overall the indicator has been on a positive path over the last ten years, but with annual declines in 2012, 2015 and 2018, and below the average for the Latin American market.

Comparative analysis of structural ratios

To round things off, Chart 3.1.2-s outlines the state of the Guatemalan insurance market when compared with the average for Latin America, measured in terms of the various structural indicators analyzed in this report. As we can see, they all fall well short of the average for Latin America, especially density, strongly suggesting relatively poor levels of local development when compared with the wider region.
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Insurance market rankings

Overall ranking

The Guatemalan insurance industry consisted of 28 insurance companies in 2018. The top five institutions accounted for 64% of total premiums, 0.6% less than in 2017. As indicated in our 2017 report, levels of concentration within the Guatemalan insurance market has been on a medium-term downward trend over the last ten years, although the Herfindahl index for the country shows that concentration levels have remained above the theoretical threshold associated with moderate levels of concentration. A similar conclusion can be drawn from the CR5 index, which fell from 69.8% in 2008 to 64.0% in 2018 (see Chart 3.1.2-t).

As illustrated in Chart 3.1.2-u, the two most important insurance groups in the Guatemalan market were once again El Roble, with 24.7% of market premiums (falling 1.3 pp in 2018), and G&T, with a market share of 18.3%. Some distance behind, we have Aseguradora General with a market share of 8.2% (up 0.4 pp on 2017), MAPFRE with 7.3%, maintaining its position with respect to the previous year, and Seguros Universales (7.2%), rising one position to rank fifth.

Non-Life and Life rankings

For the Non-Life ranking, El Roble again tops the table with a share of 26.7% of total premiums. G&T (21.2%) and Aseguradora General (9.0%) followed in the same order as the previous year. 

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* Indexes calculated as the coefficient of the country's structural ratio to the average values of the coefficient in question for the entire Latin American market. The unit's performance is equivalent to the regional average.
Lastly, with respect to the Life ranking, Aseguradora Rural occupies first position with 17.5% of total premiums, despite having lost 3.2% of the share with respect to the previous year (20.6%), followed by El Roble with 17.0%. Columna is in third position, with 8.2% of total premiums in this segment of the market (see Chart 3.1.2-v).
Key regulatory aspects

In 2018, the Monetary Board issued Resolution JM-3-2018, Regulations on Corporate Governance for Insurers and Reinsurers, with the purpose of regulating the aspects to be observed by insurers and reinsurers authorized to operate in the country, when adapting to best corporate government practices as a key part of the end-to-end risk management processes and to ensure an effective system of internal control. These aspects include the establishment and implementation of policies and procedures to ensure adequate corporate governance, in accordance with the business strategy of the insurer or reinsurer, as well as a policy on conflicts of interest.

These regulations also require a set of internal regulations governing the operation of the highest governance body, a written corporate governance manual containing the governance structure, the mechanisms and means of control to verify compliance, as well as an annual corporate governance report. Furthermore, insurers and reinsurers are required to form audit and risk management committees and empower them to establish other support committees. The legislation also requires them to set up administrative compliance and risk management units.

The Superintendency of Banks, which is tasked with the prudential supervision of the Guatemalan insurance industry, in accordance with the provisions of the Insurance Business Law, via Resolution 156-2018 of 2018, set the minimum amounts of initial paid-up capital for national insurers or reinsurers, or foreign insurers or reinsurers, incorporated in the national territory, to operate exclusively in the branches of life or personal insurance, damage insurance and surety insurance, as well as to operate in all lines and exclusively in reinsurance.

3.1.3 Honduras

Macroeconomic environment

The Honduran economy grew 3.7% in real terms in 2018, versus 4.9% in 2017 (see Chart 3.1.3-a). The slowdown in the economy was due to a lower inflow of foreign exchange into the country resulting from a reduction in the flow of remittances, as well as a decrease in the value of net exports. According to ECLAC data, the value of exports as on June 2018 had fallen sharply due to a drop in coffee prices, its main export product. The deficit in the current account of the balance of payments sharply...
declined, reaching -4.2% of GDP at the close of 2018 (compared to -1.8% in 2017), due to rising prices for oil. On the supply side, highlights in the second quarter included the solid performance of the finance sector (7.1% year on year), electricity, gas and water (7.0%) and mining (5.8%). As for demand, growth was driven by investment, which grew 6.4% in the first half of the year when compared with the same period last year, and by private consumption (4.2%).

It is worth noting that the deficit control effort carried out by the Honduran authorities, which, after several years of fiscal adjustments agreed with the IMF, went from 7.9% in 2013 to 2.7% in 2017. It is expected that economic activity will pick up to a level of around 3.4% in 2018 as a result of the increased deficit in the Honduran National Energy Company’s revenue balance sheet, based on ECLAC’s provisional estimates for February 2018.

Average inflation in 2018 was 4.4% (3.9% in 2017), within the central bank’s target range of 3.0% and 5.0%. Education (7.2%), transport (6.1%) and personal care items (5.5%) registered the highest increases. According to the latest estimate released by ECLAC, open unemployment is likely to be 5.7% of the economically active population (EAP) in 2018.

Looking ahead to next year, ECLAC estimates that the GDP of Honduras will grow at around 3.5% thanks to a moderate expansion of Honduras’ main trading partner (the United States), a slight increase in remittances, falling fuel prices, and continued investment in infrastructure projects. The IMF has forecast growth of 3.4% for 2019.

Insurance market

Growth

The Honduran insurance market achieved a premium volume of 11.16 billion lempiras (US$ 467 million) in 2018. This represents growth of 7.7% in nominal terms and 3.2% in real terms relative to the previous year [see Table 3.1.3]
and Chart 3.1.3-b). For the second consecutive year, growth within the Honduran insurance industry was down (0.5 percentage points) on the previous year, when premiums rose by 8.1% in nominal terms.

Life premiums were up 13.9% in 2018 (versus a decline of -3.3% registered in 2017) to 3.62 billion lempiras (151 million dollars). Meanwhile, Non-Life insurance premiums were up 4.9% (versus growth of 14.1% in 2017), to reach 7.54 billion lempiras (315 million dollars). The three most important modalities of Non-Life insurance (Fire, Automobile and Health) were up by 7.2%, 4.4% and 5.9%, respectively. Accordingly, Life insurance contributed a positive 4.3 percentage points to the overall growth of 7.7% registered in the Honduran insurance market, while Non-Life insurance contributed 3.4 percentage points (see Chart 3.1.3-c).

<table>
<thead>
<tr>
<th>Line of business</th>
<th>Millions of lempiras</th>
<th>Millions of US dollars</th>
<th>Increase Nominal (%)</th>
<th>Increase Real (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>11,158</td>
<td>467</td>
<td>7.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Life</td>
<td>3,622</td>
<td>151</td>
<td>13.9</td>
<td>9.2</td>
</tr>
<tr>
<td>Non-Life</td>
<td>7,536</td>
<td>315</td>
<td>4.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Fire and allied lines</td>
<td>2,257</td>
<td>94</td>
<td>7.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Automobiles</td>
<td>1,649</td>
<td>69</td>
<td>4.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Health</td>
<td>2,075</td>
<td>87</td>
<td>5.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Other lines</td>
<td>628</td>
<td>26</td>
<td>19.0</td>
<td>14.1</td>
</tr>
<tr>
<td>Transport</td>
<td>269</td>
<td>11</td>
<td>10.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Surety</td>
<td>151</td>
<td>6</td>
<td>-23.4</td>
<td>-26.6</td>
</tr>
<tr>
<td>Personal accident</td>
<td>377</td>
<td>16</td>
<td>-2.0</td>
<td>-6.1</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>123</td>
<td>5</td>
<td>-14.0</td>
<td>-17.6</td>
</tr>
<tr>
<td>Occupational risks</td>
<td>7</td>
<td>0</td>
<td>-82.7</td>
<td>-83.4</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the National Commission of Banks and Insurance Companies)

1/ Premiums net of returns and cancellations

Balance sheet and equity

Chart 3.1.3-d shows developments in the aggregate balance sheet of the Honduran insurance industry over the the 2008-2018
period. Based on this data, the sector’s total assets amounted to 16.36 billion lempiras (672 million dollars), while equity stood at 5.76 billion lempiras (237 million dollars), thus, together with 2013 alone, following a downward path throughout the year. The aggregate capitalization levels of the Honduran insurance industry (measured in relation to total assets) are significant, at around 40% in the 2008-2012 period. Since then, capitalization has stagnated somewhat to reach roughly 37% of total assets, with the exception of 2015 (35.6%) and 2018 (35.2%).

**Investment**

Chart 3.1.3-e shows developments in the Honduran insurance industry’s investment over the 2008-2018 period, while Charts 3.1.3-f and 3.1.3-g show the composition of the aggregate sector-level investment portfolio over that period and also in 2018.

Total investment by insurance companies operating in the Honduran market came to 9.84 billion lempiras (404 million dollars) in 2018, with 85.4% concentrated in debt and equity instruments, 8.0% in cash, 1.8% in real estate and the remaining 4.8% in other financial investments, highlighting the growing trend of...
investment in cash over the period under analysis, a trend that began to reverse in 2015.

As is the case with most insurance sectors in Latin America, the trend over the period has been toward an increase in the share of debt and equity investment (which, in the case of Honduras, appeared to have stagnated from 2014 onward), peaking at its highest value of the last ten years in 2018.

**Technical provisions**

Chart 3.1.3-h shows changes in technical provisions in the Honduran insurance industry over the 2008-2018 period. In this case, with the data available to us, it is not currently possible to conduct a more detailed analysis of the composition of technical provisions at sector level.

However, in aggregate terms technical provisions experienced sustained absolute growth over the 2008-2018 period, with the exception of a slight dip in 2010, to reach 2018 7.3 billion lempiras (300 million dollars).
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Technical performance

Chart 3.1.3-i shows the technical performance of the Honduran insurance industry over the 2008-2018 period, based on an analysis of the market’s combined ratio.

As we can see, this technical ratio came to 81% in 2018, 0.3 percentage points below the level attained in 2017 (81.3%), thus continuing the technical performance improvement process that began in 2013. This improvement was largely down to the reduction in the loss ratio, which fell from 48.7% in 2015 to 45.9% in 2018. Meanwhile, the expense ratio has improved to reach the lowest level in recent years, standing at 35.1%.

Results and profitability

The Honduran insurance industry posted a net result of 1.23 billion lempiras (51.5 million dollars) in 2018, up 14.1% on the previous year. It should be noted that the net result obtained

Source: MAPFRE Economic Research (with data from the National Commission of Banks and Insurance Companies)
in 2018 by the Honduran insurance industry was mainly a product of the improvement in the sector’s technical result thanks to the improvement seen in the expense ratio.

This improved result was reflected in the profitability indicators. As a result, return on equity (ROE) stood at 21.4% in 2018, up 3.9 percentage points from 2017. In a similar vein, return on assets (ROA) amounted to 7.5% in 2018, up 1.0 percentage points from the value reported in 2017 (see Chart 3.1.3-j).

Insurance penetration, density and depth

Chart 3.1.3-k shows the main structural trends shaping the development of the Honduran insurance market over the 2008-2018 period. The penetration index (premiums/GDP) came to 1.9% in 2018, 0.1 percentage points below the level reported in 2008. As we noted in our 2017 report, the penetration index for Honduras has stagnated over the course of the last ten years, in contrast to the average growth in penetration seen across the wider Latin American insurance market.

Insurance density in Honduras (premiums per capita) amounted to 1,164 lempiras (49 dollars), up 5.9% on 2017 (1,099 lempiras). Density has been on an upward trend, registering cumulative growth of 73.8% over the 2008-2018 period.

Meanwhile, depth (measured in terms of the relationship of Life insurance premiums to total premiums) stood at 32.5% of the respective index in 2018, i.e. 7 percentage points higher than in 2008 and 1.8% higher than the previous year, and remains below the absolute depth value for the average of countries in the region (44.6%).

Estimation of the Insurance Protection Gap

Chart 3.1.3-l provides an estimate of the IPG for the Honduran insurance market between 2008 and 2018. This data shows that the IPG stood at 32.85 billion lempiras (1,374 million dollars) in 2018, 2.9 times the size of the actual insurance market in Honduras at the close of the year.

The structure and performance of the insurance gap over the period under analysis are shaped mainly by the Life insurance segment. Indeed, Life insurance accounted for 63.6% of the IPG at the close of 2018 (20.89 billion lempiras), 6.6 percentage points below the share for this segment in 2008. The remaining 36.4% of the gap is attributable to the Non-Life insurance segment (11.96 billion lempiras). Accordingly, the potential insurance market in Honduras at the close of 2018 (sum of the actual market plus the IPG) is estimated at 44.0 billion lempiras (1.84 billion dollars), 3.9 times the size of the total insurance market in Honduras that year.

Chart 3.1.3-m provides an estimate of the IPG as a multiple of the actual insurance market in Honduras. As noted in our 2017 report, the insurance gap as a multiple increased over the 2008-2011, before falling from 2012 onward. In the Life insurance segment, the gap narrowed (from 8.2 to 5.8 times) between 2008 and 2018. The same cannot be said for the Non-Life insurance segment, however, where the insurance gap has displayed a positive trend over the period under analysis by climbing from 1.2 to 1.6 times over the period.

Chart 3.1.3-n summarizes changes in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Honduran insurance market between 2008 and 2018. Only the Life insurance business saw an improvement, while in the case of the Non-Life segment the IPG as a multiple of the actual market has deteriorated, as indicated above.
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Chart 3.1.3-k
Honduras: changes in penetration, density and depth, 2008-2018
(premiums/GDP, %; premiums per capita, lempiras and USD; Life insurance premiums/total premiums, %; index 2008=100)

Source: MAPFRE Economic Research (with data from the National Commission of Banks and Insurance Companies)
Last but not least, Chart 3.1.3-o provides an overview of the capacity of the Honduran insurance market to close the insurance gap, by means of a comparative analysis between the growth rates observed over the last ten years and the growth rates that would be needed to close the 2018 gap over the coming ten years.

The analysis reveals that the Honduran insurance market posted an average growth rate of 7.6% over the 2008-2018 period; the product of an annual growth rate of 10.2% in the Life insurance segment and of 6.6% in the Non-Life segment. Thus, were the Honduran insurance market to maintain the same rates of growth over the next ten years as those seen over the last ten years, then market growth would prove insufficient to close the IPG calculated for 2018.

The shortfall would be 10.9 percentage points for the Life insurance segment and 3.4 percentage points for Non-Life insurance. It
should be noted that, in the case of Non-Life insurance, this shortfall has worsened compared to the shortfall calculated for this purpose in our 2017 report.

Market Development Index (MDI)

Chart 3.1.3-p provides an estimate of the Market Development Index (MDI) for the Honduran insurance industry over the 2005-2018 period. The MDI is an ad hoc indicator used in this report to display the general trends in the evolution and maturity of insurance markets. In the case of the Honduran insurance industry, the indicator shows positive growth throughout the period under analysis. This trend is broadly similar to the average performance across Latin American insurance markets through to 2015, albeit with setbacks in certain years (2009, 2010 and 2014).

Comparative analysis of structural ratios

Chart 3.1.3-q outlines the state of the Honduran insurance market when compared with the average for Latin America, measured in terms of the various structural indicators featured in this report. As we can see, they all fall short of the average for Latin America, especially in terms of density.
Insurance market rankings

Overall ranking

Twelve insurance companies were operating in the Honduran insurance market in 2018, the same number as the previous year. The market share of the top five insurers (CR5) represented 76.5% of total premiums, lightly down on the concentration level reported in 2017 (77.0%).

Thus, concentration levels in industry have remained relatively stable in recent years, albeit at values that indicate relevant levels of concentration. The Herfindahl index has remained above the threshold for moderate concentration over the last ten years (see Chart 3.1.3-r).

Chart 3.1.3-s ranks in detail the insurance groups operating in the Honduran market in 2018, which continues to be led by Ficohsa Seguros (formerly Interamericana) which, with 24.8% of premiums, is down -1.5 percentage points in its market share. Following behind is MAPFRE (19.4%), with a 0.7 percentage points increase in market share over the previous year, and Atlántida (15.8%), which also gained 0.4 percentage points in market share last year.

MAPFRE Economic Research

* Indexes calculated as the coefficient of the country’s structural ratio to the average values of the coefficient in question for the entire Latin American market. The unit’s performance is equivalent to the regional average.
Non-Life and Life rankings

Ficohsa Seguros also leads the Non-Life ranking with a share of 28.1% of total premiums. Atlántida follows with 17.7%, which this year surpassed MAPFRE with a market share of 17.0%.

Lastly, in the Life ranking, MAPFRE regained first position with 24.3% of total premiums, followed by Ficohsa Seguros with 17.8%. Atlántida dropped from third position behind Davivienda Seguros with 13.1% of premiums in this segment of the market (see Chart 3.1.3-t).
Key regulatory aspects

In 2018, the National Honduran Commission on Banking and Insurance (CNBS) concentrated its supervisory work on strengthening a model based on best practices for risk management, in order to promptly implement appropriate preventive and corrective measures to keep institutions that manage public resources healthy, in the form of deposits, insurance premiums, and contributions for pensions and retirement, thus promoting the stability of the national financial system. The above is reflected by positive solvency, liquidity, adequacy of reserves, technical reserves and investment coverage indicators (CIRCULAR CNBS Nº004/2018), among other items.

To support efforts to strengthen the new supervision model over this period, the CNBS followed up on the activities contemplated in the Cooperation Agreement and Technical Assistance with the Toronto Leadership Center, a Canadian organization specializing in supervisory processes and the strengthening of financial stability. The purpose of the agreement is to provide technical assistance to the CNBS for three years to improve and strengthen the current Risk Based Supervision Program (RBP), which is applicable to financial intermediaries, insurance companies, and pension funds. This support began in July 2017 and is expected to conclude in 2020.

With respect to the current applicable legal framework in the country regarding financial matters, it is important to point out that in 2018, technical support from the Inter-American Development Bank (IDB) was granted with respect to the draft amendments to the Law on Insurance and Reinsurance Institutions, the purpose of which is to incorporate the provisions contained in said Law into the best practices and international standards in various areas such as corporate governance, risk management, microinsurance, alternative marketing channels, and resolution measures, among others. During this support phase, the draft bill was consulted by the Honduran Chamber of Insurance Companies (CAHDA) and the Central Bank of Honduras (BCH).

It is worth mentioning that the strengthening process implemented for the supervision model was accompanied by the development and updating of the regulatory framework, which is essential for the proper functioning of the supervised entities. Among the prudential
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Regulations updated or prepared in 2018, the following are worth highlighting:


- Circular CNBS No.009/2018 and Circular CNBS No.011/2018, approval of temporary relief mechanisms to support the refinancing or readjustment of credit obligations to debtors affected or susceptible of being affected by climatic events, infestations, and the falling international price for coffee producers and traders.

- Circular CNBS No.014/2018, approval of Regulations for Liquidity Risk Management.


- Circular CNBS No.002/2018 and Circular CNBS No.019/2018, updating of accounts that comprise the Investment Resources (IR) for Insurance Institutions, as well as the Eligible Assets for Investments that will support these Investment Resources, based on the new IFRS accounting framework.

- Circular CNBS No.020/2018, approval of temporary relief mechanisms to support the country’s productive sector, in relation to agricultural, forestry, livestock, poultry, beekeeping, and fishing activities, affected by heavy rains caused by the various weather conditions of the winter season.

- Circular CNBS No.021/2018, amendments to the Management Standards for Exchange Credit Risk to be Observed by Financial System Institutions in the Granting of Credit Facilities in Foreign Currency.

- Circular CNBS No.005/2018 and Circular CNBS No.022/2018, amendments to Rules for the Evaluation and Classification of the Credit Portfolio.


- Circular CNBS No.027/2018, updating the minimum amounts of capital required from Financial System Institutions.

As regards the adoption of international best practices, the CNBS continued in 2018 with the road map defined for the implementation and adoption of International Financial Reporting Standards (IFRS) in the supervised institutions, working on the preparation and approval of accounting manuals and the design and implementation of electronic means for the capture and reporting of financial information outflows, among other issues.

In the area of money laundering and financing of terrorism, the CNBS approved the “Regulatory Act for the Regulation of Designated Non-Financial Businesses and Professions (DNFBPs),” published in the Official Gazette on June 26, 2018, the purpose of which is to establish the provisions, general rules and procedures applicable to regulated entities for compliance with the objectives described in the Regulatory Act for Designated Non-Financial Businesses and Professions, and with the obligations set out in international conventions and instruments relating to the prevention of money laundering and financing of terrorism signed and ratified by the Republic of Honduras. With the approval of the Regulations mentioned above, a six-month period was established from their publication in the Official Gazette for the regulated entities to submit the Compliance Program and the Adjustment Plan to the Unit for the Investigation, Monitoring and Prevention of Money Laundering and Financing of Terrorism (URMOPRELAFT), in order to comply with the...
provisions of Articles 14 and 66 of the above-mentioned Regulations.

### 3.1.4 El Salvador

#### Macroeconomic environment

El Salvador’s economy grew 2.5% in real terms in 2018, compared to 2.3% in the previous year (see Chart 3.1.4-a). This growth was the result of strong domestic demand, in particular the impact of gross capital formation and private consumption, driven by a slight reduction in the cost of borrowing and increasing household and business financing.

On December 28, 2018, S&P raised El Salvador’s credit rating to B-, with a stable outlook. In 2017, a lack of political consensus at the Legislative Assembly caused the government to run up arrears of 56.6 million dollars (1.1% of the total budget) on liabilities associated with Pension Investment Certificates (certificados de inversión previsional, or CIP for short). For this reason, the rating agencies placed the country in selective default. This led to falls in the sovereign risk rating to CCC+, B- and B3 by S&P, Fitch and Moody’s respectively, during virtually the entirety of 2018, with a corresponding increase in the cost of financing public debt.

According to ECLAC estimates, the fiscal deficit of the non-financial public sector in 2018, including pensions, will be 2.7% of GDP (2.5% in 2017). Public debt to GDP stood at 69.7%, similar to the figure at the fiscal year-end of the previous year.

Salvadoran exports grew 3% year-on-year in value between January and September 2018, but fell by 5.9% in volume. The United States continues to be the main market for exports, although exports to Mexico were the most dynamic, increasing by 36.4% over the same period last year. By sector, the sales growth of the manufacturing industry stands out, registering a year on year increase of 16%, mainly driven by textile products (20.3%); the manufactured articles include electricity wires and cables (81.8%), cotton yarns (51.8%) and clothing (40.1%). Meanwhile, imports grew around 12.3% in value and 3.2% in volume. Significantly, rising prices for oil had a negative impact, leading to a year-on-year increase of 22.5%. As a result, the trade deficit rose by 24.4% year-on-year over the period. According

![Chart 3.1.4-a](image-url)

**Chart 3.1.4-a**

*El Salvador: changes in economic growth and inflation, 2008-2018*

*(GDP in local currency, billions of USD; real growth rate, %; annual inflation rate, %)*

Source: MAPFRE Economic Research (based on IMF data)
to ECLAC, the current account deficit in the balance of payments could reach 3.2% of GDP by the close of 2018 (2.0% in 2017).

Average inflation stood at 1.1% in 2018 compared with 1.0% in 2017, while the unemployment rate was 6.7% compared with 7% in 2017.

ECLAC expects the Salvadoran economy to grow 2.3% by 2019, due to the strength of the domestic market and driven by family remittances and foreign trade. Meanwhile, the IMF estimates that the Salvadoran economy will post 2.5% growth in 2019.

**Insurance market**

**Growth**

Total premiums in the Salvadoran insurance market rose by 6.7% in nominal terms (5.6% in real terms) to reach 658 million dollars, thus overcoming the decrease of 0.8% recorded the previous year (see Table 3.1.4-a and Chart 3.1.4-b). Life insurance premiums accounted for 33.3% of the total market (1.6% less than in 2017), which grew 1.8% in nominal terms in 2018 to reach 219 million dollars. Non-Life premiums were also up 9.4% to 438 million dollars. By modality, individual and group Life insurance grew 3.1%, while welfare and pension insurance shrank by 2.9%. Significant growth was recorded in the Non-Life segment.
in all modalities, with Accidents and illness (15.2%) and Credit and Surety (17%) among the most noteworthy.

Chart 3.1.4-c shows that the Salvadoran insurance market grew 6.7% in 2018, with the Life insurance segment contributing 0.6 percentage points, and Non-Life insurance contributing the most with 6.1 percentage points, primarily driven by Accidents and illness.

**Balance sheet and equity**

Changes in the Salvadoran insurance industry’s aggregate balance sheet over the 2008-2018 period are shown in Chart 3.1.4-d. This information shows that the sector’s total assets...
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amounted to 891.5 million dollars in 2018, up 4.2% year on year.

High levels of aggregate capitalization of the Salvadoran insurance industry over total assets stand out on the balance sheet. This indicator has remained above 40% in the 2008-2018 period, reaching a peak of 52.3% in 2010, and decreasing slightly thereafter to 44.4% of total assets in 2018.

Investment

Chart 3.1.4-e shows developments in total investment, while Charts 3.1.4-f and 3.1.4-g provide a breakdown of the aggregate investment portfolio at sector level of the Salvadoran insurance market over the 2008-2018 period. Investments totaled 648.2 million dollars in 2018 (up 2.5% on 2017), of which 78.5% was concentrated in debt and equity instruments, 12.2% in cash, 3.4% in real...
estate, and the remaining 5.9% in other financial investments (Chart 3.1.4-g).

As indicated in our 2017 report, when analyzing the sectoral investment patterns over the 2008-2018 period, we can observe a sharp decline in 2012 in the percentage of assets held as cash, after which it increased to reach the second highest point of the period in 2018 at above 12.2%, at the expense of a lower percentage of investment in debt and equity instruments and other financial investments (Chart 3.1.4-f).

**Technical provisions**

Charts 3.1.4-h, 3.1.4-i and 3.1.4-j show the relative composition and performance of the Salvadoran insurance industry’s technical provisions over the 2008-2018 period. According
to this data, technical provisions amounted to 317.2 million dollars in 2018; 38.4% of the total related to technical provisions associated with Life insurance, 29.6% to the provision for unearned premiums and unexpired risks in Non-Life insurance, 29.2% to the outstanding loss provision, and the remaining 2.8% to provisions for catastrophic risks.

Broadly speaking, all technical provisions experienced sustained absolute growth between 2008 and 2018. The only notable exception relates to life insurance provisions, which fell slightly in 2015 before making a gradual recovery from then onward. Apart from this, no particularly significant changes in the composition of technical provisions have been observed over the last ten years.

**Technical performance**

Chart 3.1.4-k shows the technical performance of the Salvadoran insurance industry over the 2008-2018 period, based on an analysis of the market’s combined ratio. This data shows the decline of this indicator since 2008, with the
combined ratio shifting from 82.5% in 2008 to 98.8% in 2018. It should be noted that the reduction in the technical indicator for 2018 was largely a result of a decrease in the expense ratio, which grew 1.3 percentage points.

Results and profitability

The Salvadoran insurance industry posted a before-tax result of 36.2 million dollars in 2018 (versus 35.2 million dollars in 2017). As can be seen in Chart 3.1.4-i, the technical result has been on a sustained downward path since 2008, with the exception of 2017, which has been affecting the profitability of the insurance industry.

As such, ROE in the Salvadoran market confirms the downward trend, falling to 9.2% in 2018, 1.1 percentage points lower than in 2017, and 9.1 percentage points lower than in 2008. A similar trend can be observed when we look at return on assets (ROA), which amounted to 4.1% in 2018, virtually unchanged from 2017.

Insurance penetration, density and depth

Chart 3.1.4-n shows the main structural trends shaping the development of the insurance industry in El Salvador over the 2008-2018 period. The penetration index (premiums/GDP) stood at 2.5% in 2018, just 0.1 percentage points up on the level observed ten years earlier. It should be noted that the penetration rate in the Salvadoran insurance market has following a divergent trend and is below the average for Latin American markets (2.9%).

Meanwhile, the density indicator (premiums per capita) stood at 102 dollars in 2018, up from the level reported the previous year (96 dollars). The density of the Salvadoran insurance market has been steadily increasing over the period, registering cumulative growth of 43.0% throughout the 2008-2018 period.

With regard to the depth of the Salvadoran market [measured as the relationship of Life insurance premiums to total premiums], the indicator stood at 33.3% in 2018, practically the same value as in 2008, and 1.6% lower than in 2017. As stated in our 2017 report, the indicator had been on an upward trend until 2014, after which it experienced a notable decline, thus increasing the divergence in relation to the average for the countries in the region (44.6% in 2018).

Estimation of the Insurance Protection Gap

Chart 3.1.4-n provides an estimate of the IPG for the Salvadoran insurance market between 2008 and 2018. From this data we can see that the IPG stood at 1,345.8 million dollars in 2018, equivalent to 2.0 times the size of the actual insurance market at the close of the year (a similar to the previous year).

The structure and performance of the IPG over the 2008-2018 period under analysis are shaped mainly by the Life insurance segment. Indeed, Life insurance accounted for 67% of the insurance gap at the close of 2018 (896.8 million dollars), down 3.6 percentage points on 2008. The remaining 33% of the IPG is attributable to the contribution of the Non-Life segment (449 million dollars). Accordingly, the potential insurance market in El Salvador at the close of 2018 [sum of the actual market plus the IPG] is estimated at 2,003.4 million dollars, accounting for 3 times the total insurance market in El Salvador that year.

Chart 3.1.4-o provides an estimation of the IPG as a multiple of the actual market over the 2008-2018 period. As a multiple, the IPG for the Life insurance segment has tracked downward on a sustained basis over the period under analysis (from 5.0 to 4.1 times), though there are signs of this trend has slowing down or even reversing from 2013 onward. The medium-term trend for the Non-Life segment is stable, at levels close to 1.1 times the actual market in this period.

Chart 3.1.4-p summarizes changes in the IPG as a multiple of the actual market for the Life
El Salvador: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Financial System Superintendency)
and Non-Life segments and for the total Salvadoran insurance market over the last ten years, comparing the situation in 2018 with the state of the market in 2008. As the data shows, only the Life insurance market in El Salvador has shown an improvement.

Lastly, Chart 3.1.4-q provides an overview of the capacity of the Salvadoran insurance market to close the IPG for 2018, based on a comparison between the growth rates observed over the last ten years and the growth rates that would be required in order to close the IPG for 2018 over the coming ten years.

In line with this fiscal year, the Salvadoran insurance market grew at an average annual rate of 4.1% between 2008 and 2018; the Life
segment saw average annual growth of 4.2%, while the Non-Life segment reported annual growth of 4.1%. Were the same rate of growth seen over the last ten years to continue over the next ten years, the growth rate of the Salvadoran insurance market would not be enough to seal the IPG for both the Life segment (short 13.5 pp) and the Non-Life segment (short 3.2 pp). Significantly, the shortfall for both the Life and Non-Life segments increased with respect to the fiscal year covered in our 2017 report.

**Market Development Index (MDI)**

As discussed previously, the Market Development Index (MDI) is used as an indicator of general trends in the performance and maturity of the insurance market. Chart 3.1.4-r shows the calculation for the Salvadoran insurance industry.

In broad terms, the MDI has been on positive and upward path until 2014, from which point onward there is a decreasing and clearly divergent trend with respect to the average performance of the Latin American insurance markets.

**Comparative analysis of structural ratios**

Chart 3.1.4-s summarizes the state of the Salvadoran insurance market in comparison with the average for Latin America, based on the four structural indicators analyzed above. The current state of the insurance market in El
El Salvador is below the average for all indicators in Latin America, especially density (per capita premiums).

Insurance market rankings

Overall ranking

A total of 22 insurance companies were operating in El Salvador in 2018, the same as the previous year. The Herfindahl and CR5 indexes both point to a slight decline in the degree of market concentration in El Salvador from 2013 onward.

The market share of the top five insurers (CR5) represented 54.5% of total premiums in 2018, slightly down on 2017 (54.7%). The Herfindahl index, meanwhile, has remained practically in line with the theoretical threshold consistent with moderate levels of concentration in the insurance industry, diverging positively from this trend only from 2013 onward (see Chart 3.1.4-t).

In the overall ranking of insurance groups in 2018 that are shown in Chart 3.1.4-u, the top three spots are occupied by the same insurance groups as in 2017. Seguros e Inversiones (SISA) remains in top position, with a market share of 19.1% (up 0.8 pp), followed closely by Aseguradora Suiza Salvadoreña (18.5%, up 0.2 pp) and Aseguradora Agrícola...
Comercial (13.5%, which lost -1.0 pp of market share this year compared to the previous year).

**Non-Life and Life rankings**

The top three positions in the ranking of Non-Life insurance groups for El Salvador are held by Aseguradora Suiza Salvadoreña (with 18.3% of market premiums), having exchanged positions with Aseguradora Agrícola Comercial (in second position this year with a 17.6% share), while MAPFRE is in third position (with a share of 15.3%).

Moving to the ranking of insurance groups in the Life segment, SISA tops the table with 28.1% of premiums (-0.6 pp down on 2017). Meanwhile, Aseguradora Suiza Salvadoreña,
with a market share of 18.8%, occupies second position, and ASSA, with a share of 14.3%, remains in third position (see Chart 3.1.4-v).

**Key regulatory aspects**

With respect to the key regulatory developments that occurred in 2018, as well as those that have taken place so far in 2019, it is worth highlighting the Draft Bill on Insurance Contracts. This bill includes additions to the provisions of the El Salvador Commercial Code from Article 1344 to 1500, and provisions for new contracts such as pet insurance, unemployment insurance, and new digital contracting mechanisms, among others: collective and group insurance; microinsurance; loss of earnings insurance; theft insurance; animal insurance; liability insurance; credit insurance; and unemployment insurance.

The Draft Bill on Insurance Activity is also significant as it contains a section on solvency aimed at considering capital requirements for different risks, establishing parameters to be considered in a general manner and applying its methodology to regulations, including: corporate governance provisions; risk management system obligation; new minimum amounts of share capital for incorporation; additional capital requirements for credit, market, and operational risks; the capital requirement for technical risk maintains the current model, by updating factors of deviation from the loss ratio; new registers of insurance adjusters, national reinsurance brokers and external auditors; provisions for the sale of microinsurance; branch authorization of foreign insurers in El Salvador and Salvadoran insurers abroad; provisions for voluntary and forced liquidation of insurance companies; standardization of unlawful conduct and quantification of sanctions, and administrative complaint procedure before the Superintendence of the Financial System in case of discrepancy (see Table 3.1.4-b).
3.1.5 Nicaragua

Macroeconomic environment

The political and social crisis in Nicaragua, which began in the second quarter of 2018, has had a major impact on the economy, causing it to shrink from real GDP growth of 4.9% in 2017 to -4% in 2018, with a year-on-year drop of 7.7% in the fourth quarter of the year (see Chart 3.1.5-a).

This situation has impacted virtually all sectors of activity, especially the construction, commerce, tourism, and livestock sectors. Turning to the external sector, the drop in imports was greater than that of exports, which led to an improvement in the current account, reaching a surplus of 0.6% of GDP at the close of 2018, compared to 5% of GDP in 2017. Meanwhile, the ratio of public debt to GDP stood at 52.5% at the end of 2018 (46.8% in 2017), with a fiscal deficit of 2.6% for the year as a whole (1.5% in 2017).

Average inflation came to 5% in 2018 (compared with 3.9% in 2017). This increase was primarily a result of rising prices for oil and its derivatives. Meanwhile, the unemployment rate was 5.5% at the close of 2018, compared with 3.3% the previous year. In the face of uncertainty over Nicaragua’s economic performance, ECLAC estimates that GDP will contract by 5.0% in 2019. As a result, the performance of several sectors of the economy, especially construction, tourism, and financial services, will continue to be significantly affected. Difficulties are expected...
regarding access to international finance and investment income if confidence and economic certainty are not restored in the country. The IMF’s estimated contraction for 2019 is 5.0%.

Insurance market

Growth

The Nicaraguan insurance market achieved premiums of 7.07 billion cordobas in 2018 (223 million dollars), revealing a nominal increase of 6.8% and a real growth of 1.7% year on year (see Table 3.1.5). The Nicaraguan insurance market has not been able to maintain growth at levels similar to those recorded in previous years in 2018, falling even further short of the high growth experienced in real terms from 2012 to 2017 (see Chart 3.1.5-b).

<table>
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<tr>
<th>Line</th>
<th>Millions of cordobas</th>
<th>Millions of USD</th>
<th>Increase Nominal (%)</th>
<th>Increase Real (%)</th>
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<td>Total</td>
<td>7,066</td>
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<td>1.7</td>
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<td>Life</td>
<td>1,451</td>
<td>46</td>
<td>12.1</td>
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<td>Non-Life</td>
<td>5,615</td>
<td>177</td>
<td>5.5</td>
<td>0.5</td>
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<tr>
<td>Automobiles</td>
<td>1,463</td>
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<td>-10.7</td>
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<tr>
<td>Fire and allied lines</td>
<td>1,921</td>
<td>61</td>
<td>18.2</td>
<td>12.6</td>
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<td>Other lines</td>
<td>1,201</td>
<td>38</td>
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<td>4.5</td>
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<tr>
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<td>14</td>
<td>0.4</td>
<td>-4.3</td>
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<tr>
<td>Personal accident</td>
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<td>7</td>
<td>-1.2</td>
<td>-5.9</td>
</tr>
<tr>
<td>Credit and/or surety</td>
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<td>-24.0</td>
<td>-27.6</td>
</tr>
<tr>
<td>Transport</td>
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<td>2.8</td>
<td>-2.1</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>158</td>
<td>5</td>
<td>11.6</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Banking Superintendency and other financial institutions)

1/ Net refunds and cancellations
Life insurance accounted for 19.6% of total premiums in the Nicaraguan insurance market, and posted growth of 12.1% (4.5 pp less than the previous year), to reach 1.45 billion cordobas (46 million dollars). Meanwhile, Non-Life premiums grew 5.5% (compared to 12.4% in 2017) to 5.62 billion cordobas (177 million dollars). The two most important modalities, Automobile and Fire, performed differently; the former fell 6.3% in nominal terms and the latter grew 18.2%. Personal accidents (-1.2%) and Credit and Surety (-24%) also fell compared to the previous year.

As a result, the Life segment contributed only 2.4 percentage points of the 6.8% nominal growth recorded by the Nicaraguan insurance market in 2018, while the remaining 4.4 percentage points were contributed by the growth of Non-Life insurance (see Chart 3.1.5-c).

Balance sheet and equity

Chart 3.1.5-d shows changes in the Nicaraguan insurance industry’s aggregate balance sheet over the 2008-2018 period. Based on this data, we can see that the sector’s total assets stood at 12.01 billion cordobas in 2018 (369 million dollars), while equity amounted to 4.36 billion
cordobas (134 million dollars), up 26.5% on the previous year.

Thus, aggregate levels of capitalization within the Nicaraguan insurance industry in 2018, relative to total assets, stood at 21.2%, having gradually increased over the 2008-2018 period to reach 36.3% of total assets by the end of the year.

Investment

Chart 3.1.5-e shows developments in total investment in the Nicaraguan insurance industry, while Charts 3.1.5-f and 3.1.5-g provide a breakdown of the aggregate portfolio at sector level over the 2008-2018 period. As we can see, investment in 2018 totaled 8.36 billion cordobas (257 million dollars), with 90.9% concentrated in debt and equity instruments, 3.3% in cash and the remaining 5.8% in real estate investments. Generally speaking, debt and equity instruments have traditionally accounted for the bulk of the Nicaraguan insurance market’s investment portfolio over the last ten years; however, their weight has decreased in 2018 in favor of other types of investments, with increases seen in real estate investments (+1.1 pp) and cash (+0.7 pp).

Technical provisions

Charts 3.1.5-h, 3-1-5-i and 3.1.5-j show the evolution and relative composition of the Nicaraguan insurance industry’s technical provisions over the 2008-2018 period. In 2018, technical provisions amounted to 5.08 billion
cordobas (156 million dollars). Of these total technical provisions, 15.0% related to Life insurance, 32.8% to provisions for unearned premiums and unexpired risks in Non-Life insurance, 31.6% to technical outstanding loss provision, and the remaining 20.7% to provisions for catastrophic risks.

The volume of technical provisions has generally grown on a sustained basis in absolute terms during the period under analysis, both for Life and Non-Life insurance. However, this trend reversed in 2018 when total technical provisions fell by 8.8 percentage points, with a particularly sharp fall in those relating to life insurance.

Technical performance

Chart 3.1.5-k shows the technical performance, or total combined ratio, of the Nicaraguan insurance industry over the 2008-2018 period. As we can see, the combined ratio of the sector worsened slightly between 2017 and 2018,
rising by 1.4 percentage points to 84.3%, mainly due to a 2.4 percentage point increase in the loss ratio (up 44.1%). The cost ratio fell by 0.98 percentage points to 40.2% in 2018.

**Results and profitability**

The Nicaraguan insurance industry posted a net result of 1.05 billion cordobas (33 million dollars) in 2018, up 10.8% on the previous year, underpinned by a positive set of technical and financial results that have been a feature of the Nicaraguan insurance sector since 2008 (see Chart 3.1.5-I).

Turning to profitability, the Nicaraguan insurance industry achieved a return on equity (ROE) of 24.0% in 2018, down 3.4 percentage points compared to 2017. Return on assets (ROA), meanwhile, reached 8.7% in 2018, an increase of 0.2 percentage points on the previous year. Overall, and despite the complicated state of the country’s economy, the upward trend in profitability levels in the insurance industry has continued in line with an improved technical performance which began in 2012.

**Insurance penetration, density and depth**

Chart 3.1.5-n shows the main structural trends shaping the development of the insurance industry in Nicaragua over the 2008-2018 period.
period. The penetration rate (premiums/GDP) came to 1.7% in 2018, barely 0.4 percentage points above the level reported ten years earlier. The penetration index for the Nicaraguan insurance market has been on an upward trend since 2013, in line with the average penetration trend observed for the wider Latin American insurance market. However, in absolute terms, it is still well below the average for the region (2.9%).

Insurance density in Nicaragua (premiums per capita) amounted to 1,093 cordobas (35 dollars), up 5% on the level seen the previous year (1,037 cordobas). The density indicator (measured in local currency) has followed an upward path, showing a cumulative increase of 196.3% over the 2008-2018 period.

Lastly, the depth (Life insurance premiums to total premiums) of the Nicaraguan insurance market came to 20.5% in 2018, i.e. 4.2 percentage points above the level reported in
Chart 3.1.5-m
Nicaragua: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, cordobas and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Banking Superintendency and other financial institutions)
THE LATIN AMERICAN INSURANCE MARKET IN 2018

2008 and, in general, in line with the overall trend across Latin American markets, although at absolute levels still well below the average for the region (44.6% in 2018).

Estimation of the Insurance Protection Gap

Chart 3.1.5-n provides an estimate of the IPG for the Nicaraguan insurance market between 2008 and 2018. From this information we can see that the IPG stood at 25.1 billion cordobas (793 million dollars) in 2018, 3.6 times the size of the actual insurance market in Nicaragua at the close of that year.

As is the case for most Latin American insurance markets, the structure and performance of the IPG over the 2008-2018 period are shaped mainly by the Life insurance segment. Indeed, Life insurance accounted for 66% of the insurance gap at the close of 2018 (16.47 billion cordobas), 1
percentage point below the share for this segment in 2008. The remaining 34% of the gap is attributable to the contribution of the Non-Life segment (8.63 billion cordobas). Therefore, the potential insurance market in Nicaragua at the close of 2018 (the sum of the actual insurance market plus the IPG) was estimated at 32.16 billion cordobas (1.02 billion dollars), 4.6 times the size of the total insurance market in that year.

Chart 3.1.5-o provides an estimate of the IPG as a multiple of the actual insurance market in Nicaragua. In this case, as a multiple the IPG has continually declined throughout the period under analysis, both for the Life insurance segment (falling from 22.2 to 11.3 times) and Non-Life insurance (from 2.1 to 1.5 times).

Chart 3.1.5-p summarizes changes in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total insurance market in Nicaragua over the last ten years, comparing the situation in 2018 with the state of the market in 2008. As we can see, there was a significant improvement in the Life segment, with less progress in the Non-Life segment.

Lastly, Chart 3.1.5-q provides an overview of the capacity of the Nicaraguan insurance market to close the IPG calculated for 2018, based on a comparison between the growth rates observed over the last ten years and the growth rates that would be required in order to close the IPG for 2018 over the coming ten years. The analysis reveals that the Nicaraguan insurance market posted an average annual growth rate of 13.0% over the last ten years; the product of an annual growth rate of 15.6% in the Life insurance segment and of 12.4% in the Non-Life segment.

The analysis reveals that were the Nicaraguan insurance market to maintain, over the next ten...
years, the same rates of growth as seen over the 2008-2018 period, then market growth would effectively be sufficient to close the IPG for 2018, but only in the case of the Non-Life segment. For the Life segment, the observed growth rate would fall short by 13.0 percentage points.

**Market Development Index (MDI)**

Chart 3.1.5-r provides an estimation of the Market Development Index (MDI) for the Nicaraguan insurance industry. The MDI, which is used as an indicator of general patterns shaping the performance and maturity of the insurance market, shows an upward trend over the 2008-2018 period.

As can be seen in the aforementioned graph, the trend is broadly in line with the average of Latin American insurance markets, showing a deterioration between 2009 and 2012 followed by a resumption of the positive trend from that point onward, which places it at the average value of the indicator for the Latin American insurance market in 2018.

**Comparative analysis of structural ratios**

To round things off, Chart 3.1.5-s outlines the state of the Nicaraguan insurance market when compared with the average for Latin America, measured in terms of the various structural indicators featured in this report. As we can see, the Nicaraguan insurance market falls short of the average for Latin America, especially when it comes to density and depth, although the market development indicator is similar to the average for the wider region.

**Insurance market rankings**

**Overall ranking**

In 2018, the Nicaraguan insurance industry, as in 2017, was made up of only five insurance companies operating in the market. As we can see in Chart 3.1.5-t, over the last ten years there has been a mild trend toward a decrease in market concentration levels. Over the entire 2008-2018 period, the Herfindahl index has remained above the theoretical threshold associated with high levels of concentration. The same applies when looking at the CR3 index (the market share of the three biggest companies) for the Nicaraguan market, showing a steady
reduction in industry concentration levels over the period, but still with significantly high levels of concentration.

América is the company that leads the overall ranking of the Nicaraguan market in 2018, with a market share of 28.4%. The following two positions in the ranking are occupied by INISER, with a share of 23.1%, and ASSA with 21.2%. Interestingly, Lafise moved from second to fourth position from 2017 (see Chart 3.1.5-u).

Non-Life and Life rankings

In the Non Life ranking, the leading company in the Nicaraguan market for 2018 again was América, with a 28.2% market share, while second and third position were held by INISER and ASSA with 23.9% and 21.0% market share, respectively; the latter surpassing Lafise, which was second the previous year with 23.9%.

Lastly, there are no changes in 2018 compared to the previous year in the ranking of companies operating in Life insurance. The ranking is topped by América with 29.2% of market premiums, followed by Lafise (25.3%) and ASSA (21.8%).

Key regulatory aspects

In terms of regulatory changes in the Nicaraguan insurance market in 2018 (and up to June 2019), the following regulations were issued by the Superintendency of Banks and other Financial Institutions, which is tasked with supervising insurance activity in the country:
117. Rule on Distribution of Profits of Insurance, Reinsurance and Surety Companies (Resolution No. CD-SIBOIF-1043-2-FEB27-2018, dated February 27, 2018). This rule is aimed at establishing minimum guidelines that insurance companies must comply with in order to distribute profits, in order to strengthen the functions and powers of the Superintendency of Banks and Other Financial Institutions with a view to promoting the stability and strengthening of insurance companies. This will be done through adequate supervision to ensure the liquidity, solvency, and capital adequacy of the institutions so that they can comply with the obligations assumed in relation to their policyholders by virtue of the insurance policies they issue.

117. Rule for Updating the Capital Stock of Insurance Companies (Resolution No. CD-SIBOIF-1083-1-NOV20-2018 dated November 20, 2018). The purpose of this rule is to comply with the obligation established in Article 34 of Law 733, General Law on Insurance, Reinsurance and Sureties, of updating the minimum capital stock of insurance companies due to variations in the national currency at least every two years. The updated amounts are as follows: property and compulsory insurance, 59,790,000.00 cordobas; personal insurance (life, personal accident, health, pension insurance, and income), 59,790,000.00 cordobas; property and compulsory insurance, plus personal, income and pension insurance, 119,580,000.00 cordobas; surety, 14,947,500.00 cordobas, and reinsurance or surety reinsurance, an amount equivalent to 1.5 times the amounts established in the previous paragraphs for each of the modalities it operates.
Rule on the Control and Internal Audit of Insurance, Reinsurance and Surety Companies, and Branches of Foreign Insurance Companies (Resolution No. CD-SIBOIF-1089-2-DIC11-2018 dated December 11, 2018). The purpose of this rule was to establish and update the minimum criteria required for the Internal Control and Audit of insurance companies in accordance with international standards and best practices and to adapt it to the new accounting framework for insurance companies, in accordance with the Rule for the Implementation of the Accounting Framework for Insurance, Reinsurance and Surety Companies approved by Resolution No. CD-SIBOIF-1028-1-NOV21-2017 dated November 21, 2017, prepared based on International Financial Reporting Standards (IFRS).

Rule for the Management of Premiums Receivable. This rule was approved in June 2019 by the Board of Directors of the Superintendency of Banks and Other Financial Institutions, and will enter into force once it is published in the Official Gazette. The purpose of this rule is to establish general guidelines for insurance companies to more efficiently manage their premiums to be collected for insurance policies and sureties, in such a way that they comply with International Accounting Standard Number 8 (IAS 8) when making provisions for uncollectibility: “Accounting policies, changes in accounting estimates and errors,” which states, among other matters, that it is necessary to prepare estimates for nonrecoverable accounts receivable, including premiums due for insurance companies, whose losses must be reasonably estimated for the preparation of financial statements.

The draft amendment to the Reinsurance, Fronting and Coinsurance Rule is in process in 2019, the main purpose of which is to incorporate supervisory aspects for national insurance brokers and to regulate concentration limits in reinsurance operations and to amend the Rule for the Authorization and Operation of Insurance Intermediaries, which aims to adjust certain aspects of off-site supervision. Furthermore, a new rule for the calculation of technical reserves for current risks, pending obligations, reserves for occurred and unreported losses (IBNR), and catastrophic risks is planned.

3.1.6 Costa Rica

Macroeconomic environment

The Costa Rican economy grew 2.7% in real terms in 2018, down on the 3.4% reported the previous year, thus extending the slowdown that began in 2016 (see Chart 3.1.6-a). The slowdown was the result of weakening domestic demand, mainly private consumption and, to a lesser extent, public consumption, since gross fixed capital formation was more dynamic than in the previous year. The context of a restrictive monetary policy also contributed to this slowdown, with benchmark interest rate hikes in response to exchange rate pressures and a slight rise in inflation.

The average inflation rate reached 2.3% in 2018 (down from 1.6% in 2017), below but at least heading toward the central bank’s target of 3% (with a tolerance range of one percentage point either side).

Meanwhile, according to information published by the Central American Monetary Council, public debt reached 66.3% of GDP at the close of 2018 (64.3% in 2017) and the 2018 fiscal deficit would close the year at around 5.8%, compared to 6.2% the previous year, representing the main vulnerability of the Costa Rican economy. Significantly, a fiscal reform was approved in December 2018 through the Law to Strengthen Finances, in order to reverse this situation. The current account was also in deficit at 3.1% of GDP, a similar shortfall to the previous year.

By economic sector, the construction sector saw an average year-on-year expansion of 23.4% in the first half of 2018, after registering a contraction in 2017, thanks to the revival of sales projects and industrial warehouses.
Financial and insurance activities (4.7%) and information and communications services (5.1%) continued to post robust growth, while manufacturing posted more moderate growth (2.5%). The average unemployment rate stood at 10.3% in 2018, compared with 9.1% the previous year.

ECLAC estimates GDP growth of 2.5% for 2019, mainly due to the boost from the external sector. The overall effect of the fiscal reform will be felt over several years, with the negative balance of the central government approaching 5.5% of GDP in 2019. The IMF estimates growth of 2.9% for 2019.

**Insurance market**

**Growth**

Premium volume in the Costa Rican insurance market stood at 771.9 billion colones (1.34 billion dollars) in 2018, reflecting nominal growth of 3.0% and real growth of 0.7% year on year (see Table 3.1.6 and Chart 3.1.6-b). This slowdown in the growth of the insurance industry as compared with the previous year can be explained by the performance of the Non-Life business, given that the Life business grew slightly more than the previous year. As for the historical data series, as indicated in previous reports, the growth contrasts with the sharp slowdown seen in 2015 (-9.4%), which coincided with a change in premium accounting criteria implemented in 2015 by Instituto Nacional de Seguros de Costa Rica (the insurance company with the largest market share) in order to bring its approach in line with current regulations. However, the changes make it more difficult to compare statistical data for 2015 onward with data for previous years, both in terms of revenue per premium and the balance sheet and income statements.

Chart 3.1.6-b shows that Life insurance premiums, which accounted for 16.0% of the total, grew 11.5% in 2018 to 123.93 billion colones (214 million dollars), while Non-Life premiums were up by 1.5% to 647.98 billion colones (1.12 billion dollars). Half of the Non-Life insurance lines are expected to grow in 2018. Growth was seen in those sectors with most weight: Automobile (2.3%), Accident and Health (13.2%), and Workplace Accidents...
and fell in sectors with less weight, Fire (2.8%), Other lines (2.2%) and Third-party liability (0.2%), to name a few. Thus, in contrast to the years prior to 2018, the largest contribution to the growth of the Costa Rican insurance industry was not from the Non-Life segment. This segment accounted for 1.3 percentage points of the overall sector.

Thus, in contrast to the years prior to 2018, the largest contribution to the growth of the Costa Rican insurance industry was not from the Non-Life segment. This segment accounted for 1.3 percentage points of the overall sector.

<table>
<thead>
<tr>
<th>Line</th>
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<th>Millions of USD</th>
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<td>Total</td>
<td>771,902</td>
<td>1,335</td>
<td>3.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Life</td>
<td>123,926</td>
<td>214</td>
<td>11.5</td>
<td>8.9</td>
</tr>
<tr>
<td>Non-Life</td>
<td>647,976</td>
<td>1,121</td>
<td>1.5</td>
<td>-0.8</td>
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<tr>
<td>Automobiles</td>
<td>221,682</td>
<td>384</td>
<td>2.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Fire and allied lines</td>
<td>84,447</td>
<td>146</td>
<td>-2.8</td>
<td>-5.0</td>
</tr>
<tr>
<td>Accident and health</td>
<td>114,638</td>
<td>198</td>
<td>13.2</td>
<td>10.6</td>
</tr>
<tr>
<td>Other lines</td>
<td>52,644</td>
<td>91</td>
<td>-2.2</td>
<td>-4.4</td>
</tr>
<tr>
<td>Transport</td>
<td>10,756</td>
<td>19</td>
<td>6.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>15,948</td>
<td>28</td>
<td>-0.2</td>
<td>-2.4</td>
</tr>
<tr>
<td>Credit and surety</td>
<td>6,756</td>
<td>12</td>
<td>-53.3</td>
<td>-54.4</td>
</tr>
<tr>
<td>Agriculture and livestock</td>
<td>236</td>
<td>0</td>
<td>7.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Workplace accidents</td>
<td>140,870</td>
<td>244</td>
<td>1.6</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the General Insurance Superintendency)

1/ Gross premium (direct insurance plus accepted reinsurance)
growth of 3.0 in 2018; Life insurance contributed 1.7 percentage points (see Chart 3.1.6-c).

Balance sheet and equity

Chart 3.1.6-d shows the aggregate balance sheet of the Costa Rican insurance industry over the 2010-2018 period. This information shows that the total assets of the insurance industry for the country amounted to 2.4 trillion colones in 2018 (3.96 billion dollars), while equity stood at 1.01 trillion colones (1.67 billion dollars), an increase of 7.5 percentage points over the previous year.

Chart 3.1.6-c
Costa Rica: contribution to insurance market growth, 2008-2018 (percentage points, pp)

Source: MAPFRE Economic Research (with data from the General Insurance Superintendency)

Chart 3.1.6-d
Costa Rica: changes in the insurance industry’s aggregate balance sheet, 2008-2018 (Local currency amounts; change in equity, pp)

Source: MAPFRE Economic Research (with data from the General Insurance Superintendency)
The Costa Rican insurance industry maintained capitalization levels (measured over total assets) of around 41% between 2011 and 2018, reaching 42.2% of total assets in 2018.

**Investment**

Chart 3.1.6-e shows developments in total investment by the Costa Rican insurance industry, while Charts 3.1.6-f and 3.1.6-g provide a breakdown of the aggregate investment portfolio at sector level of the insurance industry over the 2011-2018 period. Investment totaled 1.76 trillion colones (2.89 billion dollars) in 2018, with 91.3% concentrated in financial instruments, 3.3% in cash and 5.3% in real estate. The 3.2 percentage points decrease in cash weighting in favor of financial instruments in 2018 is worth highlighting.

Source: MAPFRE Economic Research (with data from the General Insurance Superintendency)

*The percentages shown on the graph may not add up to 100% due to rounding.*
As stated in our report for 2017, there has been no substantial change in the structure of insurance industry investment over the 2011-2018 period, with financial instruments remaining the main instrument ahead of cash and real estate investment.

Technical provisions

Chart 3.1.6-h shows the performance of technical provisions in the Costa Rican insurance industry over the 2010-2018 period. This information shows that technical provisions amounted to 875 billion colones (1.44 billion dollars) in 2018, compared to 546 billion colones (960 million dollars) in 2010. Significantly, technical provisions within the Costa Rican insurance industry grew consistently over the 2010-2018 period in aggregate terms.

Technical performance

Chart 3.1.6-i shows the performance of the Costa Rican insurance industry over the 2010-2018 period, analyzed on the basis of the performance of the combined ratio. During this period there was a marked increase in the loss ratio in 2014 and 2015; however, in 2018 the loss ratio fell 1.0 percentage points to 54.7%. Meanwhile, the expense ratio increased by 5.4 percentage points in 2018 to reach 49.2%. As a result of the increase in the cost ratio over the last year, the combined ratio once again exceeded 100% to reach 103.9, an increase of 4.4 percentage points.
Results and profitability

The Costa Rican insurance industry posted a net result of 72.37 billion colones (125 million dollars) in 2018. The financial result remained very strong at 20.0% of premiums, while the technical result was worse than in 2017 (see Chart 3.1.6-j).

In terms of profitability indicators, return on equity (ROE) stood at 7.1% in 2018, falling by 0.4 percentage points compared to 2017. The same applies to return on assets (ROA), which reached 3.0% in 2018, down -0.1 percentage points on the previous year.

Insurance penetration, density and depth

Chart 3.1.6-k shows the main structural trends shaping the development of the Costa Rican insurance industry over the 2008-2018 period. The penetration index (premiums/GDP) stood at 2.2% in 2018, down slightly on the figure reported in 2017, and up by just 0.14 percentage points over the last ten years. The penetration index for the Costa Rican market has thus maintained a less dynamic and divergent trend than the average for all Latin American insurance markets, falling below the average absolute penetration rate for the region.

Insurance density in Costa Rica (premiums per capita) reached 154,398 colones (267 dollars), up 2% on the level reached in 2017 (151,381 colones). The density indicator for the Costa Rican market (measured in local currency) has generally shown a growing trend between 2008 and 2018, with the exception of 2015, when there was a 9.4% dip in market premium volume. This was essentially the result of changes in the accounting treatment of premiums, as mentioned previously in this section of the report.

Finally, depth in the Costa Rican insurance market (Life insurance premiums to total premiums) reached 16.1% in 2018, 12.2 percentage points above the value reached in 2008. Depth has grown throughout the period under analysis, although consistently remaining below the average absolute values across Latin America (44.6% in 2018).
Chart 3.1.6-k
Costa Rica: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, colons and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the General Insurance Superintendency)
Estimation of the Insurance Protection Gap

Chart 3.1.6-l provides an estimation of the insurance gap for the Costa Rican insurance market between 2008 and 2018. In 2018, the IPG stood at 1.9 trillion colones (3.28 billion dollars). The structure and performance of the IPG between 2008 and 2018 were shaped mainly by the Life insurance segment. At the end of 2018, Life insurance accounted for 71.9% of the IPG (1.36 trillion colones), down 6.4 percentage points on the contribution of that segment in 2008. The remaining 28.1% of the IPG is a product of the Non-Life insurance segment (534 billion colones).

The potential insurance market in Costa Rica at the end of 2018 (the sum of the actual market plus the insurance gap) was thus estimated at 2.67 trillion colones (4.61 billion dollars), 3.5 times the size of the total Costa Rican insurance market in 2018, compared with 3.4 times in 2017.
Chart 3.1.6-m provides an estimation of the insurance gap as a multiple of the real Costa Rican insurance market between 2008 and 2018. The insurance gap, measured as a multiple of the actual market, has remained stable over time for the Non-Life insurance segment (remaining below but close to 1), while declining for the Life insurance segment over the period under analysis (falling from 59.3 to 11 times the actual market).

Chart 3.1.6-o
Costa Rica: capacity to close the IPG, 2008-2018
(average annual growth rate, %; sufficiency or insufficiency, pp)

Source: MAPFRE Economic Research
Chart 3.1.6-n outlines the changes in the insurance gap as a multiple of the actual market for the Life and Non-Life segments and for the total insurance market in Costa Rica over the last decade, by comparing the state of the market in 2018 to the situation in 2008. It is clear to see that the Life insurance business has seen the biggest improvement in the gap.

Lastly, Chart 3.1.6-o summarizes the capacity of the Costa Rican insurance market to close the gap determined in 2018. As indicated previously, this is based on a comparative analysis between the growth rates observed over the last ten years and the growth rates that would be needed to close the IPG set in 2018 over the next decade.

This analysis reveals that the Costa Rican insurance market grew at an average annual rate of 8.7% over the period under analysis; the product of an average annual growth rate of 25.5% in the Life insurance segment and of 7.2% in the Non-Life segment. Were the same rate of growth observed over the past decade to continue over the next ten years, the growth rate of the insurance market would be sufficient to close the insurance gap in the Non-Life segment, but would fall 2.7 percentage points short in the Life segment. This represents a deterioration with regard to the analysis carried out in last year’s report.

**Market Development Index (MDI)**

Chart 3.1.6-p provides an estimation of the Market Development Index (MDI) for the Costa Rican insurance industry. The MDI is used in this report as an indicator of general trends shaping the performance and maturity of insurance markets. In the case of the Costa Rican insurance industry, the MDI has shown a positive trend over the period under analysis. However, as indicated in previous reports, it is important to note that in the case of Costa Rica, this trend may be overestimated due to the rapid growth in the Life insurance market, which started from a very small base in 2005. Chart 3.1.6-p therefore includes an adjustment to eliminate this overestimation and present the underlying trend in market performance more accurately. After making this adjustment, it is clear that the Costa Rican insurance market has developed in line with the average level seen across the markets in the region.

![Chart 3.1.6-p](image-url)

Source: MAPFRE Economic Research

* Setting to eliminate overestimation in the Life IPG closing speed
Comparative analysis of structural ratios

Finally, Chart 3.1.6-q summarizes the state of the Costa Rican insurance market when compared with the average for Latin America, measured in terms of the structural indicators analyzed in this report: penetration, density, depth and MDI.

As can be seen, the market is still below the average for Latin America in terms of penetration and of depth in particular, but not in the case of density and MDI, which are actually slightly above the regional average.

As discussed in our 2017 report, this comparison reveals the low level of development in the Life segment within the Costa Rican market with respect to the wider region, while also showing the growth potential of this segment of insurance activity in Costa Rica.

Insurance market rankings

Overall ranking

There were 13 insurance companies operating in Costa Rica in 2018, the same as the year before. The Costa Rican insurance market only opened up to competition in 2008 and remains
highly concentrated, with a single company (the Instituto Nacional de Seguros, or INS) accounting for the majority of all premiums. Chart 3.1.6-r shows the Herfindahl and CR5 indexes for the Costa Rican insurance industry. As can be seen, levels of concentration are well above the theoretical threshold associated with a high degree of market concentration, although concentration levels are steadily decreasing. In the medium-term, this could lead to greater levels of competition within the insurance market.

The top five insurance groups in the overall ranking for 2018 remained the same as the previous year, with only a few changes in their
relative positions. As shown in Chart 3.1.6-s, the ranking is still led by INS, with a market share of 71.8% (down 3.2 percentage points on 2017), followed by ASSA (6.4%), Pan American (5.8%), Adisa (3.9%) and MAPFRE (3.3%).

**Life and Non-Life rankings**

As shown in Chart 3.1.6-t, INS also leads the Non-Life ranking, with a market share of 74.6% (down 2.4 percentage points on 2017). It is followed by ASSA (6.4%), Pan American (5.9%), Adisa (2.6%) and MAPFRE (2.6%). INS is also the leading insurance company in the Costa Rican Life insurance market, with a share of 56.9% (6.2 percentage points lower than in 2017), followed by Adisa (10.7%) in second position and MAPFRE (7%) in third.

**Key regulatory aspects**

The most relevant changes in regulations in the Costa Rican insurance market implemented by the General Superintendency of Insurance (SUGESE) in 2018 are summarized below.

Prior to 2018, major policy changes were approved to implement a risk-based supervision model in Costa Rica. The Corporate Governance Regulations, Informational Technology Management Regulations and the Regulation on Risk Management and Internal Control Systems, as well as the Integrated Framework for Insurance Supervision, were developed and approved. 2018 was therefore a year dedicated to implementing and applying these SUGESE supervision process regulations.

It should be noted that changes to policy during this time were oriented toward Costa Rica’s intention to become a member of the Organization for Economic Cooperation and Development (OECD). These changes affected standards from both the supervisory authority, headed by the National Council for the Supervision of the Financial System (CONASSIF), and the legislative branch of the Republic.

In the case of the former, some of the initiatives promoted by SUGESE were approved and adopted or are in the process of being adopted given the transitory nature of the agreements to be approved, and in the case of the latter, the proposals have been submitted to the Legislative Assembly to be debated and approved as per the Constitution.

Of these regulations (which are to be approved by CONASSIF), the following were finalized during 2018:

- Regulation on Authorizations, Registers and Operating Requirements for Companies Supervised by the General Superintendency of Insurance Amendment. Some aspects of this regulation were modified in order to better comply with OECD Codes of Liberalization (the Code of Capital Movements and the Code of Invisible Operations), and to contribute to competitive conditions in the sector in accordance with international best practice, specifically: (a) the registration of cross-border suppliers was narrowed down to those under a free trade agreement and those offering insurance to the general public; (b) the wording of some articles was amended to clarify that reinsurers, reinsurance intermediaries and reinsurance support services do not need to register; (c) the requirement for cross-border suppliers’ financial guarantees was replaced by an annual renewal of their registration; and (d) the requirements for these suppliers’ initial registration were modified and renewal requirements were established. Moreover, to comply with OECD legal instruments, Annex 1 of this regulation, which relates to the classification of insurance by branch and line, was updated to include the lines recommended by the OECD: “Miscellaneous” for both personal and property insurance, and Health for periods longer than one year.

- Amendment of the Regulation for Registering Insurance Products: eliminating the registration of cross-border insurance policies, thus conforming to usual international practices. This amendment also aimed to improve the degree of compliance with OECD legal instruments.
and included a minimum definition for terrorism, which should be incorporated into the general conditions of the policy for products that include terrorism coverage.

• Amendment of the Regulation on Solvency at Insurance and Reinsurance Companies: relating to the treatment of catastrophic risk. In October 2018, CONASSIF agreed to reform solvency regulations, to adopt a new methodology for calculating the capital requirement and to establish a technical provision for earthquake and volcanic eruption coverage, which was set to come into effect on January 27, 2019. In light of feedback received from the industry when testing the new capital requirement calculation methodology toward the end of 2018, as well as the need to not create greater capital requirements for insurers during the economic situation at the end of the year, a postponement until April 1, 2020 was approved.

• Regulation on Financial Information: SUGESE, in agreement with the Superintendencies of the banking, securities and pension sectors, presented a new accounting framework in line with International Financial Reporting Standards (IFRS) to CONSASSIF. This also forms part of Costa Rica’s action plan for its entry to OECD. This framework includes the objective to concentrate a series of accounting provisions into a single regulatory instrument, which were previously found in different CONASSIF regulations. Therefore, when this comes into effect in January 2020, the accounting regulations currently governing regulated companies in the financial market, and thus the insurance industry, shall be repealed. Moreover, this new standard provides for the country to adopt the new versions of the IFRS in accordance with international time lines for its coming into effect, unless CONASSIF explicitly decides to move away from them.

Meanwhile, SUGESE is currently working on developing various policy proposals, aiming to have them approved in 2019, among which the following stand out:

• Self-issued Insurance Regulations: aiming to establish conditions for the marketing of insurance including through the self-issued insurance form provided for by Costa Rican legislation, so as to facilitate the growth of the market in sectors with insurance products that are difficult to access or require particular protection. The concept of self-issued insurance refers to insurance with no prior risk analysis and selection process, which protect insurable assets and risks common to all or most private individuals, in accordance with Article 24 of the Insurance Market Regulatory Act. Approval is scheduled for the last quarter of 2019.

• Regulation on Relevant Facts and the Disclosure of Conflicts of Interest: aiming to organize communication with SUGESE and the publication, where appropriate, of relevant facts and conflicts of interest. Approval is scheduled for the first quarter of 2020.

• Solvency Regulation Amendment: addressing different aspects of the current solvency framework, including regulations on the recognition of the particular risk of surety and modifying the treatment of reinsurance to determine capital requirements concerning that counterparty. Completion is scheduled for the first quarter of 2020.

• Regulation on Authorizations, Registers and Operating Requirements for Companies Supervised by SUGESE: proposing a comprehensive modification of the licensing and registration process, to review the requirements and procedures for the authorization and registration of participants. Completion is scheduled for the first quarter of 2020.
Finally, it is important to be aware that two draft legal amendments have been submitted to the Legislative Assembly which will directly impact supervision conditions in the Costa Rican insurance market. These proposals, while not yet law, aim to encourage supervised companies to participate in financing supervision activities, as recommended by international standards, and therefore provide greater protection for supervisors to fulfill responsibilities imposed by the Law.

3.1.7 Panama

Macroeconomic environment

The Panamanian economy suffered a slight slowdown in 2018, with a growth of 3.9% in real terms, down from 5.3% in 2017 (see Chart 3.1.7-a). However, the country continues to post high real growth rates, as it has since 2010.

According to ECLAC, this slower growth rate is a result of lower momentum in several of the country’s economic sectors, including telecommunications, trade, tourism and hotels, which were affected by higher energy costs and the strengthening of the dollar. This was reinforced by the prolonged strike by construction workers. Average inflation in 2018 rose to 0.8%, down from 0.9% the previous year, while unemployment stood at 6% (down from 6.1% in 2017).

According to information published by the Central American Monetary Council, Panamanian public debt reached 39.5% of GDP at the end of 2018 (compared with 37.5% in 2017), and the fiscal deficit would close the year on about 2.9%, compared with 3.1% the previous year. Meanwhile, the current account deficit stood at 7.8% of GDP at the end of 2018 (down from 7.9% in 2017).

ECLAC estimates that the Panamanian economy will grow 4.9% in 2019, with a rebound in the construction sector driven by the various infrastructure investment projects, mostly public. These include the construction of the fourth bridge over the Panama Canal, the expansion of the Panama-Arraiján highway, the extension of metro line two to Tocumen and the opening of a copper mine in Colón, Donoso, which is expected to produce over 320,000 tons of copper per year when fully operational. The IMF, meanwhile, estimates growth of 6% in 2019.

![Chart 3.1.7-a](chart.png)

**Chart 3.1.7-a**

Panama: changes in economic growth and inflation, 2008-2018

(GDP in local currency, billions of balboas; real growth rate, %; annual inflation rate, %)

Source: MAPFRE Economic Research (based on INDEC data)
Insurance market

Growth

In 2018, premium volume in the Panamanian insurance market reached 1.57 billion balboas (exchange rate pegged to the dollar). Nominal growth came to 6.7% in 2018, an increase in real terms of 5.9% compared with the previous year, continuing the strong performance which began in 2017, during which year premiums grew 4.5% in real terms. For various reasons, the Non-Life insurance business contributed more to the market while the Life business slowed down, in contrast to the year before (see Table 3.1.7 and Chart 3.1.7-b).

Non-Life insurance premiums, which accounted for 75% of the portfolio, grew 7.7% (6.9% in real terms) in 2018, reaching 1.18 billion balboas. The Automobile line remains the most important business in the market, followed by the Health sector, which grew a nominal 9.3% (8.5% in real terms) and a nominal 9.8% (9% in real terms) respectively. With the exception of the Surety line (a fall of 4.2% in real terms), all other insurance lines performed positively. Performance by the Health line has been particularly strong, and Health is also a line with a high degree of potential for penetration. Meanwhile, Life insurance premiums, which account for 25% of the total Panamanian insurance market, grew 3.8% in 2018 (3% in real terms), reaching 392 million balboas.
As can be seen in Chart 3.1.7-c, of the total nominal growth of 6.7% recorded by the Panamanian insurance market in 2018, 1 percentage point was contributed by the Life insurance segment, while the Non-Life segment made a greater contribution of 5.7 percentage points.

### Balance sheet and equity

Chart 3.1.7-d presents the aggregate balance sheet of the Panamanian insurance industry between 2008 and 2017. As can be seen, total assets in 2017 (latest information available) amounted to 3.17 billion balboas, while equity for that year came to 1.32 billion balboas (up 12.3 percentage points on the previous year).
The aggregate capitalization level in the insurance industry (measured on total assets) are worth highlighting. After stagnating around 34% between 2008 and 2011, it then began to grow steadily, reaching 41.5% of total assets in 2017.

**Investments**

It should be noted that in the case of the Panamanian insurance market, information relating to 2018 is not included in this section (nor in our analysis of technical provisions and profitability), as the statistical bulletin for 2018 had yet to be released by the Panamanian Superintendency of Insurance and Reinsurance when this report was written. However, information is included for the 2008-2017 period to illustrate the main trends in the Panamanian insurance market in recent years.
In terms of investment in the insurance industry, Charts 3.1.7-e, 3.1.7-f and 3.1.7-g show the performance and structure of aggregate investment at sector level, highlighting the importance of fixed income and equity investment.

Technical provisions

Meanwhile, Charts 3.1.7-h, 3.1.7-i and 3.1.7-j present information on the performance and structure of the Panamanian sector’s technical provisions between 2008 and 2017. In this case, technical provisions associated with Life insurance accounted for a significant percentage: 47.2% in 2017.

Technical performance

In 2018, the aggregate combined ratio of the Panamanian insurance industry fell by 1.3 percentage points to reach 89.9%, thus now showing the best combined ratio of the last decade. The improvement in the combined ratio...
The Latin American insurance market in 2018

was mainly due to the reduction in the loss ratio, which fell to 53.2% in 2018 (down from 54.7% in 2017), a fall of 1.5 percentage points compared with the previous year. The expense ratio, meanwhile, remained at a similar level to 2017 with 36.7% of premiums (see Chart 3.1.7-k).

**Results and profitability**

The financial result of the Panamanian insurance industry in 2017 (last information available) was 101.7 million balboas, while the technical result of the sector came to 84.1 million balboas. The technical result was also positive in 2018, standing at 99.1 million balboas, up 18% on the previous year.
In terms of profitability, indicators have shown a growing trend from 2014 onwards. In 2017 (last data available), return on equity (ROE) was 13%, an increase of 2.7 percentage points on the year before. Return on assets (ROA) performed similarly well, reaching 5.4% in 2017, up 1.2 percentage points on the previous year (see Chart 3.1.7-l).

Insurance penetration, density and depth

Chart 3.1.7-m shows the main structural trends shaping the development of the Panamanian insurance industry between 2008 and 2018. Firstly, the penetration index (premiums/GDP) stood at 2.4% in 2018, which was a very slight rise (0.05 percentage points) from the previous year but 0.7 percentage points below the value reached a decade earlier. As stated in last year’s report, Panama’s penetration index grew until 2010, only to decrease from that year on, a trend which diverges from the average performance recorded by the Latin American insurance market as a whole.

Insurance density in Panama (premiums per capita) amounted to 376 balboas, an increase of 4.9% on the previous year (358 balboas). In contrast to the penetration index, density has been following an upward trend over the period under analysis, with a cumulative increase of 70.8% between 2008 and 2018, higher than the average for Latin America.

Lastly, the depth of the Panamanian market (measured as Life insurance premiums to total premiums) stood at 25% in 2018, down 0.7 percentage points on the previous year and down 3.7 percentage points on the figure from 2008. The Panamanian market depth indicator is in contrast to the average depth for all Latin American insurance markets.

Estimation of the Insurance Protection Gap

Chart 3.1.7-n provides an estimation of the insurance gap for the Panamanian insurance market between 2008 and 2018. As can be seen, the insurance gap in 2018 stood at 3.44 billion balboas, 2.2 the size of the actual insurance market in Panama that year.

As in most Latin American insurance markets, the structure and performance of the IPG between 2008 and 2018 was largely a product of the Life insurance segment. At the end of 2018, 69.7% of the IPG related to Life insurance (2.4 billion balboas), a decrease of 8 percentage
Chart 3.1.7-m
Panama: Insurance Protection Gap and potential market, 2008-2018
(premiums / GDP, %; premium per capita, balboas; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the General Insurance and Reinsurance Superintendency)
points compared with 2008, although 0.5% more than the previous year. The remaining 30.3% of the insurance gap related to the Non-Life insurance segment (1.04 billion balboas). Accordingly, the potential insurance market in Panama at the end of 2018 (sum of the actual market plus the IPG) was estimated at 5.01 billion balboas, 3.2 times the size of the total insurance market that year.

Chart 3.1.7-o provides an estimation of the IPG as a multiple of the actual insurance market in Panama. The indicator shows a growing trend over the last decade, both in the Life and the Non-Life segments. Performance between 2017 and 2018 was mixed. The IPG as a multiple of the market increased by 0.1 percentage points in the Life segment but decreased by 0.03 percentage points in the Non-Life segment during this time.

Chart 3.1.7-p outlines changes in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Panamanian insurance market over the last decade. As can be seen, the IPG as a multiple of the actual market experienced growth in both lines of business between 2008 and 2018, meaning that the situation has worsened in terms of the gap. This is at odds with the general trend observed across the wider Latin American region.
Chart 3.1.7-q outlines the capacity of the Panamanian insurance market to close the insurance gap determined in 2018, based on a comparative analysis between the growth rates observed over the last ten years and the growth rates that would be required to close the gap over the next ten years.

Between 2008 and 2018, the Panamanian insurance market grew at an average annual rate of 7.3%, underpinned by an average growth of 5.9% in the Life insurance segment and of 7.9% in the Non-Life segment. This analysis confirms that, were the same rate of growth observed over the last decade to be sustained over the next ten years, growth in the Panamanian insurance market would be sufficient to close the gap only in the case of the Non-Life segment, falling 15.8 percentage points short in the Life insurance segment.
Market Development Index (MDI)

As noted at various points in this report, the Market Development Index (MDI) is used as a benchmark for the overall trend observed in the performance and maturity of insurance markets. Chart 3.1.7-r provides an estimation of the MDI for the Panamanian insurance industry between 2005 and 2018. In 2018, the indicator was up 0.1 percentage points over the previous year, marking a second consecutive year of positive growth, although this growth was lower than in the previous year. As stated in previous reports, the MDI followed roughly the same trend as the Latin American insurance market until 2008 (although always remaining below that average), after which it diverged from the average performance seen across the wider region.

Comparative analysis of structural ratios

Lastly, Chart 3.1.7-s outlines the state of the Panamanian insurance market compared with the average for Latin America, measured in terms of the structural indicators analyzed. In this respect, it is clear that the Panamanian market remains below the average level for all Latin American insurance markets in relation to three of the structural indicators analyzed, the density index being the only exception.
Insurance market rankings

Overall ranking

There were a total of 25 insurance companies operating in Panama by the end of 2018, one less than in 2017. As noted in our 2017 report, while concentration in the Panamanian insurance industry generally declined until 2014, the Herfindahl and CR5 indexes both show an increase in the degree of market concentration thereafter, and notably so in 2018.

The CR5 index (market share of the five largest companies operating in the market) stood at 74.9% in 2018 (79.3% for the Life segment and 73.5% for the Non-Life segment). The Herfindahl
index, meanwhile, remained above the theoretical threshold associated with moderate levels of industry concentration, a parameter that the Panamanian market has been exceeding since 2015 (see Chart 3.1.7-t).

In the overall ranking of insurance groups in Panama in 2018, ASSA remained in first position with a market share of 25.4% (see Chart 3.1.7-u). It was followed by Compañía Internacional de Seguros, which maintained the same market share as the previous year with 16.7% of premiums. MAPFRE remained in third place with a market share of 14.7%, slightly lower than its share of 15.2% the previous year.

**Life and Non-Life rankings**

In 2018, just as in 2017, the top three insurance groups in the overall ranking of the Panamanian insurance market also occupied the top three spots in the Non-Life ranking: ASSA with a share of 24.6% (25.2% in 2017), followed by Compañía Internacional de Seguros with 17.2% (17.5% in 2017) and then MAPFRE with a market share of 15.3% (15.5% in 2017).

Finally, in the ranking of the Life insurance market in 2018, the top two spots were held by ASSA, with a share of 28% (up 3% on the previous year), and Compañía Internacional de Seguros, which rose 0.5 percentage points in 2018 to reach a share of 15.1% and one place higher than the year before. MAPFRE, despite having dropped 2 percentage points from the previous year to a market share of 12.8%, has risen to third place (see Chart 3.1.7-v).

**Key regulatory aspects**

Turning our attention to key regulatory developments, the provisions issued in 2018 in legislative matters and prudential regulation by the Panamanian Superintendency of Insurance and Reinsurance (SSRP) are set out below:

Turning to laws passed in 2018 and 2019, Law No. 26 of May 23, 2018, amending Article 68 of Law No. 68 of 2016, which regulates Basic Compulsory Accident Insurance, is of particular note.

The following Agreements issued by the SSRP are also worth highlighting:

- Agreement No. 001 of June 5, 2018, establishing the Agreement for the Identification of Regulated, Supervised and Advertising Subjects.
- Agreement No. 001 of April 9, 2019, amending Agreement No. 3 of July 27, 2015, and Agreement No. 07 of October 12, 2016, both establishing minimum criteria and parameters to be adopted by regulated entities of the insurance sector for the prevention of money laundering, financing of terrorism and financing of the proliferation of weapons of mass destruction.
- Law 56 of June 2017, on the participation of women on Boards of Directors.
- The Transit and Road Transport Authority Resolution / Use of the CTI platform replacing the vehicle insurance policy carry measure.
- Law 40 of August 2018, on the treatment of sexually transmitted infections and HIV.
- Resolution SSRP-006 of November 2018, on the disclosure of fees received by intermediaries.
- Resolution SSRP-007 of December 2018, on the framework for implementing IFRS 17.
- Resolution SSRP-008 of December 2018, on the Risk-based Oversight Framework.
- Law 70 of January 2019, on the criminalization of tax evasion.
- Law 81 of March 2019, on the protection of personal data.
3.1.8 Dominican Republic

Macroeconomic environment

The Dominican Republic’s economy grew 7% in real terms in 2018, well above the 4.6% growth reported the previous year. This growth increase can largely be explained by strong domestic demand, particularly gross capital formation and also, to a lesser extent, private consumption (see Chart 3.1.8-a). The growth of the US economy in 2018 (the Dominican Republic’s main trading partner and its largest source of remittances and tourists), combined with efforts to repair the damage caused by Hurricanes Irma and Maria in 2017, have contributed to the increased dynamism of the Dominican economy.

Economic growth was also boosted by the monetary stimulus implemented by the central bank in mid-2017. However, the central bank returned to a restrictive stance, raising the monetary policy rate by 25 basis points to 5.5% in August 2018. With this change in monetary policy came a rise in international oil prices and internal demand which, in turn, generated inflationary pressures. The average inflation rate stood at 3.6% in 2018 (3.3% in 2017), while unemployment stood at 5.6%, a similar figure to the previous year.

As regards the current account of the balance of payments, import activity was affected by rising oil prices, with the current account deficit closing at 1.4% of GDP in 2018, compared with 0.2% in 2017. Meanwhile, according to information from the Central American Monetary Council, the fiscal deficit was 2% of GDP in 2018 (3% in 2017) and public debt reached 50.4% of GDP (compared to 48.9% in 2017).

Lastly, turning to growth projections, ECLAC expects the Dominican economy to post 5.5% growth in 2019, a lower projection than in 2018, but more in line with the long-term potential of the economy, estimated at 5.0% year on year. This reduced growth is mainly due to the adjustment in the monetary policy stance mentioned above, as well as a slowdown in the dynamism of the external sector. The IMF estimates that the economy will post 5.1% growth in 2019.
Insurance market

Growth

The Dominican insurance market achieved a premium volume of 59.56 billion pesos (1.2 billion dollars) in 2018, representing nominal growth of 20.7% and real growth of 16.5%, down 0.9 percentage points on the previous year in real terms (see Table 3.1.8 and Chart 3.1.8-b). As in 2017, Life insurance premiums continued to grow strongly, gaining 12.2% in 2018 to reach 9.51 billion pesos (192 million dollars). Individual Life has once again

Table 3.1.8
Dominican Republic: premium volume1 by line of business, 2018

<table>
<thead>
<tr>
<th>Line</th>
<th>Millions of pesos</th>
<th>Millions of USD</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nominal (%)</td>
</tr>
<tr>
<td>Total</td>
<td>59,562</td>
<td>1,202</td>
<td>20.7</td>
</tr>
<tr>
<td>Life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual life</td>
<td>9,513</td>
<td>192</td>
<td>12.2</td>
</tr>
<tr>
<td>Group Life</td>
<td>9,198</td>
<td>186</td>
<td>11.4</td>
</tr>
<tr>
<td>Non-Life</td>
<td>50,048</td>
<td>1,010</td>
<td>22.4</td>
</tr>
<tr>
<td>Fire and allied lines</td>
<td>13,645</td>
<td>275</td>
<td>14.3</td>
</tr>
<tr>
<td>Automobiles</td>
<td>15,053</td>
<td>304</td>
<td>12.5</td>
</tr>
<tr>
<td>Health</td>
<td>14,911</td>
<td>301</td>
<td>45.2</td>
</tr>
<tr>
<td>Other lines</td>
<td>3,496</td>
<td>71</td>
<td>24.1</td>
</tr>
<tr>
<td>Transport</td>
<td>1,110</td>
<td>22</td>
<td>5.7</td>
</tr>
<tr>
<td>Surety</td>
<td>1,197</td>
<td>24</td>
<td>37.9</td>
</tr>
<tr>
<td>Personal Accident</td>
<td>637</td>
<td>13</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with Insurance Superintendency data)

1/ Net refunds and cancellations
experienced notable growth this year (40.4%), despite still being of marginal importance in the Dominican insurance industry. Meanwhile, group Life insurance increased by 11.4%.

Non-Life premiums (which account for 84.0% of the total) grew 22.4% in nominal terms and 18.2% in real terms (compared to 23.4% and 19.4%, respectively, a year earlier) to reach 50.05 billion pesos (1.01 billion dollars). The two most significant lines in this market segment (Automobile and Health) reported growth in real terms, 12.5% and 45.2%, respectively. It is worth noting that the other Non-Life segments also registered growth.

The Non-Life insurance segment accounted for the bulk of the 20.7% overall growth registered by the Dominican insurance market in 2018. Thus, their contribution to growth within the sector was 18.6 percentage points, while the Life segment contributed the remaining 2.1 percentage points (see Chart 3.1.8-c).

**Balance sheet and equity**

Chart 3.1.8-e shows the performance of the aggregate investment portfolio at sector level over the 2008-2018 period. From this data we can see that the sector’s total assets stood at 71.96 billion pesos (1.43 billion dollars) in 2018, while total net equity within the industry came to 20.44 billion pesos (405 million dollars), up 24.2 percentage points from the figure reported in 2017.

It is worth noting that throughout the period under analysis, the Dominican insurance industry has consistently increased its levels of equity on an annual basis. Aggregate
capitalization levels in the insurance industry (measured relative to total assets) have remained close to 30.2% throughout the period, accounting for 28.4% at year-end 2018.

Investment

Chart 3.1.8-e shows the performance of the aggregate investment portfolio at sector level over the 2008-2018 period, while Charts 3.1.8-f and 3.1.8-g show changes in investment patterns over the same period.

Based on this data, investments made by the Dominican insurance industry came to 37.8 billion pesos (750 million dollars) in 2018, mainly concentrated in debt and equity instruments (72.8%) and a relatively smaller proportion in real estate (12.4%) and cash (6.7%). In the analysis of the development of the aggregate investment portfolio, it is worth noting the change in the weight of real estate investments, which as steadily declined since 2008 (representing 16.4% of the portfolio) to reach 11.8% at year-end 2017, although they did increase by 34% in 2018 to reach 4.71 billion pesos.
trillion pesos, as compared to 3.5 trillion in 2017. Other financial investments also increased 107 percentage points to reach 3.04 billion pesos in 2018, virtually tripling the average for 2008-2017.

Technical provisions

Chart 3.1.8-h shows changes in technical provisions within the Dominican insurance market, while Charts 3.1.8-i and 3.1.8-j show changes in the relative composition of those provisions over the 2008-2018 period. Technical provisions amounted to 26.83 billion pesos (532 million dollars) in 2018. Of this total, 8.8% related to mathematical provisions and current risks in Life insurance, 27.4% to unearned premiums and unexpired risks in Non-Life insurance, 52.4% to the provision for outstanding losses, 1.9% to the provision for catastrophic risks, and the remaining 9.5% to other technical provisions.

Source: MAPFRE Economic Research (with Insurance Superintendency data)

*The percentages shown on the graph may not add up to 100% due to rounding.
Technical performance

Chart 3.1.8-k. shows the performance of the aggregate combined ratio for the Dominican insurance industry over the 2008-2018 period. The technical indicator improved by 3.8 percentage points in 2018, due to the decrease in both the loss ratio (1.6 percentage points) and the expense ratio (2.2 percentage points), bringing the combined ratio to 95.5% for the year.

Results and profitability

The Dominican insurance industry posted a consolidated result of 5.06 billion pesos (102 million dollars) in 2018, up 53.3% year on year. This result is attributable to an excellent technical result of 3.82 percentage points over the net accrued premium achieved the previous year, reaching 4.5%. Meanwhile, the financial result as a percentage of the earned premium decreased 1.2 percentage points from 2017 to reach 6.8% (see Chart 3.1.8-l).
Return on equity (ROE) stood at 24.7% in 2018, up 4.7 percentage points on the previous year. In a similar fashion, return on assets (ROA) reached 7.0% in 2018 (up 1.4 pp on 2017). As highlighted in last year’s report, both indicators continue to point to the growth in profitability seen since 2013.

**Insurance penetration, density and depth**

Chart 3.1.8-m shows the main structural trends shaping the development of the insurance industry in the Dominican Republic over the 2008-2018 period. Firstly, the penetration index (premiums/GDP), which had remained at around 1.2%, picked up again in 2018, reaching 1.5% (1.4% in 2017). Despite the positive growth shown by the indicator from 2015 onwards, the penetration rate remains well below the absolute average values for the wider region.

Insurance density (per capita premiums) stood at 5,604 pesos (113 dollars), up 19.4% on 2017 (4,695 pesos). The density of the Dominican market (measured in local currency) has steadily increased over the period under analysis, registering cumulative growth of 143.5% over the 2008-2018 period, with a clear change in direction from 2015.

Lastly, depth (Life insurance premiums to total premiums) came to 16.0% in 2018, 1.2 percentage points less than in 2017 and 4.6 percentage points higher than the level reported in 2008. While the increase in depth of the Dominican market is following the average trend seen across the wider region of Latin America, absolute levels are still well below the regional average, showing a downward trend from 2016 when it reached its all-time high (18.4%).

**Estimation of the Insurance Protection Gap**

Chart 3.1.8-n provides an estimate of the IPG for the Dominican insurance market between 2008 and 2018. The insurance gap stood at 248.27 billion pesos (5.01 billion dollars) in 2018, 4.2 times the size of the Dominican insurance market at the close of that year.

The structure and performance of the IPG over the period under analysis are shaped mainly by the Life insurance segment. Thus, at the close of 2018, Life insurance accounted for 65.2% of the IPG (161.96 billion pesos), 3.0 percentage points less than its share in 2008. The remaining 34.8% of the insurance gap can be explained by the contribution of the Non-Life insurance segment (86.31 billion pesos). Accordingly, the potential insurance market in the Dominican Republic at the close of 2018 (calculated as the sum of the actual market plus the IPG) was estimated at 307.84 billion pesos (6.1 billion dollars), equivalent to 5.2 times the size of the total insurance market for that year.

Chart 3.1.8-o provides an estimate of the IPG as a multiple of the actual market in the Dominican Republic over the 2008-2018 period. The insurance gap as a multiple of the actual market shows steady growth through to 2015, whereupon the trend reverses to be dominated by the Non-Life insurance segment, where the IPG rises from 1.9 to 1.7 times the size of the actual market over that period, despite then declining in the following two years. In the case of the Life insurance segment, the indicator for the Life insurance segment has been dropping over the 2008-2018 period, falling from 31.3 to 17.0 times.

To complete our analysis, Chart 3.1.8-p summarizes changes in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Dominican insurance market over the last ten years. This chart shows that the Life business is the only one to have managed to narrow the gap as a multiple of the market, although the gap remains notably higher than in the case of Non-Life insurance.
Chart 3.1.8-m
Dominican Republic: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, pesos and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with Insurance Superintendency data)
As with the rest of the markets analyzed in this report, Chart 3.1.8-q outlines the capacity of the Dominican insurance market to close the insurance gap, based on a comparative analysis between the growth rates observed over the last ten years and the growth rates that would be required in order to close the IPG set for 2018 over the coming ten years.

As we can see, the Dominican insurance market registered average annual growth of 10.6% over the 2008-2018 period, comprising an annual growth rate of 14.4% for the Life insurance segment and 10.0% for Non-Life insurance. Thus, were the same rate of growth observed over the last ten years to continue over the next ten years, the growth rate of the insurance market would fall short of the objective (i.e. closing the IPG) for both the Non-Life insurance segment (short -0.5 pp) and the Life insurance segment (short -19.1 pp). It should be noted that, compared with the 2017 fiscal year, this shortfall was less in the Non-
The Latin American insurance market in 2018

Life segment (-2.2 pp) and higher in the Life segment (0.6 pp).

Market Development Index (MDI)

Chart 3.1.8-r provides an estimation of the Market Development Index (MDI) for the Dominican insurance industry. The MDI is used as an indicator of general patterns shaping the performance and maturity of insurance markets. In this case, the indicator performed positively over the 2008-2018 period. However, the trend in market development in the Dominican Republic appears to diverge from the average performance of the Latin American region over this period, with setbacks in 2005-2006, 2009-2010 and 2013-2014, from which point it reverts to a very similar trend to that of the regional insurance industry.

Comparative analysis of structural ratios

Lastly, Chart 3.1.8-s outlines the state of the Dominican insurance market when compared with the average for Latin America, measured in terms of the various structural indicators featured in this report. This scheme shows that all indicators fall short of the average for Latin America, especially density and depth, strongly suggesting relatively poor levels of local development when compared with the wider region.
Insurance market rankings

Overall ranking

A total of 38 insurance companies were operating in the Dominican Republic in 2018. As has been pointed out in previous editions of this report, this is a concentrated market, although in the last ten years there has been a trend toward lower levels of concentration. While steadily reducing over time, the Herfindahl index reveals that concentration levels have remained above the theoretical threshold associated with moderate levels of concentration, and have even risen slightly in 2018 relative to the previous year. The CR5 index shows a similar trend, although it shows that the downward pattern has occurred mainly in the Non-Life insurance segment (see Chart 3.1.8-t).

The top ten insurance companies leading the overall ranking in the insurance market were the same as in the previous year. Seguros Universal tops the ranking, with 21.6% of premiums (up 0.2 pp on 2017), followed by Humano Seguros (15.4%), overtaking Seguros Reservas (14.1%), and MAPFRE (12.4%), occupying fourth position. In the rest of the
overall ranking of the Dominican market there are only small changes in market shares and relative positions compared to 2017 (see Chart 3.1.8-u).

**Non-Life and Life rankings**

Given the relative weight of Non-Life insurance within the overall Dominican market, the ranking for the segment is very similar to the overall ranking (see Chart 3.1.8-v).
The insurance companies topping the table for the Non-Life segment in 2018 are exactly the same as in previous years. In this segment of the market, there have been only minor changes in market shares and relative standings, although the rise of Humano Seguros has been particularly noteworthy.

Meanwhile, the Life ranking continues to be led by Seguros Universal, with 26% of market premiums, followed by Seguros Reservas (18.2%), overtaking MAPFRE with a market share of 17.5%.

Key regulatory aspects

Among the main regulatory adjustments on the operation of the Dominican Republic’s insurance market in 2018, Resolution 05-2018 grants the necessary permission to authorized insurers and reinsurers to consider the following investment instruments as investments of technical provisions, as provided for in Articles 145 and 146-02:

- Open and closed investment funds operated by Mutual Fund Management Companies authorized by the Superintendence of Securities.
- Publicly-offered trust shares authorized by the Superintendency of Securities.
- The purchase of instruments/securities that include a repurchase clause (repos) traded through securities dealers authorized by the Superintendency of Securities. The above-mentioned instruments may be considered as investments upon authorization by the Superintendency of Securities, under the account titled 1111 “Investments authorized by the Superintendency of Securities” in the Catalog of Accounts that is mandatory for insurance and reinsurance companies operating in that market.

3.1.9 Puerto Rico

Macroeconomic environment

The Puerto Rican economy contracted by 2.3% in real terms in 2018, deepening the recession in which it has been immersed for more than ten years (see Chart 3.1.9-a). By components, both private consumption and equipment investment were the only positive contributions to growth. This was largely the result of
increased personal and equipment replacement costs incurred as a result of the natural disasters faced by the country. In terms of foreign trade, exports continued to post growth rates below those of imports. In turn, fiscal challenges lingered on in 2018, revealing that the prolonged time mismatch between revenue and expenditures is largely due to structural problems.

Meanwhile, the inflation rate once again posted growth in 2018 (2.5% compared to 1.8% the previous year), driven by a labor market that continued to reduce the unemployment rate. However, data from the latter months of the year show a slowdown in the labor market and downward inflationary pressures. The IMF expects Puerto Rico’s economic difficulties to persist in 2019, and estimates that GDP will shrink by another 1.1%.

**Insurance market**

**Growth**

Puerto Rico’s insurance market grew 9.1% in nominal terms (6.4% in real terms) in 2018, reaching 13.94 billion dollars in premiums, in contrast to the decrease of 0.7% in nominal terms in 2017 (see Chart 3.1.9-b and Table 3.1.9). Life insurance premiums (representing 10% of the market) grew 17.7% in nominal terms (14.8% real) over the year. Meanwhile, Non-Life insurance premiums grew 8.2% in nominal terms, which translates into 5.6% growth in real terms. It is important to note that 83.1% of the Non-Life insurance segment relates to Health (associated with public health programs for the population), which registered growth of 6.1% in nominal terms (3.5% in real terms) in 2018; all other Non-Life modalities all grew, both in absolute and relative terms.

As illustrated in Chart 3.1.9-c, the bulk of the growth reported by the Puerto Rican insurance market in 2018 was due to the impact of Non-Life insurance (in particular, the Health line), which contributed 7.5 percentage points, while the Life segment contributed 1.6 percentage points.

**Balance sheet and equity**

Chart 3.1.9-d shows changes in the aggregate balance sheet of insurance companies domiciled in Puerto Rico over the 2008-2018 period. The total assets of the insurance industry in the country in 2018 amounted to 9.61 billion dollars, while equity stood at 2.56 billion dollars, 2.2 percentage points less than the value recorded the previous year.

The aggregate capitalization level of insurance companies operating in the country, measured over total assets, is above 30% between 2008
and 2016, peaking in 2012 at 35.3% and subsequently falling to 26.7% in 2018.

Investment and technical provisions

Chart 3.1.9-e shows developments in the aggregate investment portfolio at sector level for insurers operating in Puerto Rico over the 2010-2017 period (in the absence of data for 2018). At the close of 2017, the total portfolio amounted to 7.25 billion dollars, up 15.2% on the previous year. Meanwhile, Chart 3.1.9-f shows changes in technical provisions at sector level over the period under analysis. At the close of 2017, technical provisions came to 3.68 billion dollars, up 8.2% on the close of the previous year. It should be noted that it is not possible on the basis of available data to

| Table 3.1.9 |
| Puertorico: premium volume\(^1\) by line of business, 2018 |

<table>
<thead>
<tr>
<th>Line(^2)</th>
<th>Millions of USD</th>
<th>Nominal (%)</th>
<th>Real (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>13,939</td>
<td>9.1</td>
<td>6.4</td>
</tr>
<tr>
<td>Life</td>
<td>1,356</td>
<td>17.7</td>
<td>14.8</td>
</tr>
<tr>
<td>Non-Life</td>
<td>12,583</td>
<td>8.2</td>
<td>5.6</td>
</tr>
<tr>
<td>Health</td>
<td>10,459</td>
<td>6.1</td>
<td>3.5</td>
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<tr>
<td>Automobiles</td>
<td>703</td>
<td>10.8</td>
<td>8.1</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>179</td>
<td>14.9</td>
<td>12.1</td>
</tr>
<tr>
<td>Fire and allied lines</td>
<td>326</td>
<td>51.2</td>
<td>47.5</td>
</tr>
<tr>
<td>Transport</td>
<td>134</td>
<td>15.1</td>
<td>12.3</td>
</tr>
<tr>
<td>Other lines</td>
<td>781</td>
<td>21.8</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Puerto Rico Insurance Commissioner’s Office)

\(^1\) Net refund and cancellation fee on premiums
provide a more detailed disaggregation of the composition of both investment and technical provisions.

Results and profitability

The Puerto Rican insurance industry posted a consolidated result of 137 million dollars in 2018, down 59.4% on the previous year. It should be noted that this decrease in the result is comparable only to the decrease that took place in 2013-2014.

In terms of profitability indicators in 2018, the Puerto Rican market saw these drop relative to 2017. Return on equity (ROE) stood at 5.4% in 2018, down 7.5 percentage points on 2017. In similar fashion, return on assets (ROA) came to 1.4% in 2018, down 2.2 percentage points on 2017 (see Chart 3.1.9-g).

Insurance penetration, density and depth

Chart 3.1.9-h shows the main structural trends shaping the development of the Puerto Rican insurance industry between 2008 and 2018. The penetration index (premiums/GDP) stood at 13.4% in 2018, up 1.1 percentage points on the previous year and 3.4 percentage points higher than in 2008. It is the highest indicator value to be found in all of Latin America and is largely because premium volumes in this segment
include Health insurance for the poorest groups of society, which is managed by the insurance industry but covered by government budgets.

Insurance density in Puerto Rico (premiums per capita) came to 4,586 dollars in 2018 (also the highest in the region), up 13.5% on the level reported a year earlier (4,039 dollars). As with penetration, density has continued to grow over the period under analysis, with cumulative growth of 78.0% over the 2008-2018 period, strongly influenced by the impact of the health insurance line.

Lastly, the depth index for the Puerto Rican insurance market (Life insurance premiums to total premiums) stood at 9.7% in 2018, 0.7 percentage points higher than in 2017 and 2.0 percentage points higher than in 2008. However, in contrast to the penetration and density indicators, the depth growth of the Puerto Rican insurance market has been well below the trend for the wider Latin American market.

**Estimation of the Insurance Protection Gap**

Chart 3.1.9-i provides an estimate of the IPG for the Puerto Rican insurance market over the
Chart 3.1.9-h
Puerto Rico: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Puerto Rico Insurance Commissioner’s Office)
2008-2018 period. Based on this data, the IPG amounted to 3.11 billion dollars in 2018, 0.2 times the size of the insurance market in Puerto Rico at the close of that year.

As noted in previous reports, the structure and performance of the insurance gap over the period are shaped by the absolute predominance of the Life insurance segment, given the relative size of the Non-Life insurance segment (dominated by growth in Health insurance). Therefore, nearly the entire IPG was a product of the Life insurance segment at the close of 2018. Accordingly, the potential insurance market in Puerto Rico at the close of 2018 (the sum of the actual market plus the IPG) is estimated at 17.05 billion dollars, equivalent to 1.2 times the size of the total insurance market that year.

Chart 3.1.9-i provides an estimate of the IPG as a multiple of the actual insurance market in Puerto Rico. The insurance gap multiple, which is concentrated in the Life insurance segment, has continually declined over the 2008-2018 period, falling from 5.3 to 2.3 times.
To complete this analysis, Chart 3.1.9-k summarizes changes in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Puerto Rican insurance market over the last ten years, comparing the situation in 2018 with the state of the market in 2008. As we can see, there has been an improvement in the insurance gap, mainly in the Life segment, which is the least developed area in this market, relatively speaking.

Lastly, chart 3.1.9-l outlines the capacity of the Puerto Rican insurance market to close the insurance gap, based on a comparison between the growth rates observed over the last ten years and the growth rates that would be required in order to close the IPG set for 2018 over the coming ten years.

In this regard, the Puerto Rican insurance market registered average annual growth of 4.1% over the last ten years, comprising an annual growth rate of 6.6% in the Life insurance segment and 3.9% in the case of Non-Life insurance. Thus, were the same rate of growth observed of the last ten years to continue over the next ten years, then the growth rate of the Puerto Rican insurance market would fall 6.1 percentage points short of closing the gap in the Life insurance segment, which accounts for the bulk of the insurance gap in this insurance market; a shortfall that has decreased with respect to 2017 (-10 pp).

Market Development Index (MDI)

Chart 3.1.9-m provides an estimate of the Market Development Index (MDI) for the Puerto Rican insurance industry. As we can see, the...
MDI has performed positively since 2009. From that year on, there has been a trend toward convergence with the average for Latin American insurance markets, with a recovery in 2018 against the fall in the average for Latin American markets.

**Comparative analysis of structural ratios**

To round things off, Chart 3.1.9-n outlines the state of the Puerto Rican insurance market when compared with the average for Latin America, measured in terms of the various structural indicators featured in this report. With the exception of depth (due to the insufficient relative development of the Life insurance segment within the Puerto Rican market), all the other indicators, especially penetration and density, are well above the average for Latin America. As mentioned above, this is because private health insurance is a highly developed concept in Puerto Rico.

**Insurance market rankings**

**Overall ranking**

386 insurance companies were operating in the Puerto Rican market in 2018, thirteen more than in 2017. Of this total, 49 were domestic companies, 287 were foreign and 50 were surplus lines. As regards market concentration levels, the indicators used to measure this phenomenon at industry level show that concentration rose between 2008 and 2012, before decreasing until 2015, at which point they began to pick up (see Chart 3.1.9-o).

Even so, the Herfindahl index shows that the level of concentration within the industry has remained consistently below the technical threshold indicative of moderate concentration.
However, there has been a notable spike in concentration in the Life insurance segment from 2013 onward which can be seen in the CR5 index.

The top three positions in the overall ranking of the Puerto Rican insurance market in 2018 are occupied by insurance groups whose market share is well ahead of the other market participants. Once again, Triple-S topped the table with a 21.7% share of total premiums. It is followed by InnovaCare, with a share of 18.8% and MCS is in third position with a 15.8% share of the market (see Chart 3.1.9-p).

Non-Life and Life rankings

Given the relative weight of Health insurance in Puerto Rico, the overall Non-Life rankings for 2018 are very similar. Triple S occupies the top position in the Non-Life ranking in this market, with a 23.2% share of premiums; in second position is InnovaCare, with a 20.8% market share; and MCS occupies third position, with a 17.5% market share in this segment (see Chart 3.1.9-q). However, if we analyze the Non-Life ranking disregarding the Health line, that is, considering only the other insurance lines in this segment, the ranking would be topped by MAPFRE, with 14.5%, followed by Universal in second position (20.8%) and MCS in third position with 17.5% (see Chart 3.1.9-r).

As regards the ranking of the Life insurance segment in 2018, the top three positions are held by Universal Life, with a share of 29.2% of premiums, followed by Triple-S with an 8.5% market share, and finally by Massachusetts Mutual Life, with an 8.3% share.

Key regulatory aspects

Listed below are the legislative changes that took place in 2018 that modified the framework of prudential regulation of the insurance industry in Puerto Rico:

- Act No. 43-2018, amending Law 194-2011 (known as the “Health Insurance Code of Puerto Rico”), aimed at making group medical plans from “Bona Fide Associations” available on the market and establishing the requirements for offering such plans.
• Act No. 75-2018 amending Act No. 77 of June 19, 1957 (known as the "Puerto Rico Insurance Code"), for the purpose of empowering the Legislative Branch to contract its insurance.

• Act No. 150-2018 amending Act No. 77 of June 19, 1957 ("Insurance Code of Puerto Rico") for the purpose of adapting its provisions to the new reinsurance credit regulation criteria established by the "National Association of Insurance Commissioners" under the "Credit for..."
The Latin American insurance market in 2018

Reinsurance Model Law” (MDL-785), strengthening the financial solvency guarantees of insurance companies, and expanding the alternatives of proprietary insurance products in the market.

- Act No. 151-2018 amending Act No. 77 of June 19, 1957 ("Puerto Rico Insurance Code") to align it with the rule of law in the rest of the United States and the Model Act adopted by the National Association of Insurance Commissioners.

- Act No. 242-2018 amending Act No. 77 of June 19, 1957 ("Puerto Rico Insurance Code") for the purpose of improving the insurance industry’s responsiveness to the insured population.

- Act No. 243-2018 amending Act No. 77 of June 19, 1957 ("Puerto Rico Insurance Code") in order to empower the Office of the Insurance Commissioner to instruct property insurance insurers to issue partial payments or advances to the insured party or claimant following a catastrophic event, for items that are not in dispute.

- Act No. 244-2018 amending Act No. 77 of June 19, 1957 ("Puerto Rico Insurance Code") for the purpose of requiring insurers to submit a Disaster or Emergency Response Plan to the Office of the Insurance Commissioner, and to strengthen the Commissioner’s oversight tools.

- Act No. 245-2018 amending Act No. 77 of June 19, 1957 ("Puerto Rico Insurance Code") for the purpose of allowing the commercial sector greater access to the surplus line market.


- Act No. 247-2018 amending Act No. 77 of June 19, 1957 ("Puerto Rico Insurance Code") for the purpose of providing additional civil remedies and protections to citizens in the event of failure to comply on the part of the insurer with the provisions of this Act.

- Act No. 249-2018 amending Act No. 77 of June 19, 1957 ("Insurance Code of Puerto Rico") for the purpose of establishing a special panel for cases of medical/hospital incompetence in order to evaluate the merits or demerits of the lawsuits filed in this regard, in cases arising under the provisions of this Act, and to determine whether it is necessary to recommend the imposition of a bond on the claimant, as well as to delimit the functions of the panel and its composition.

**Chart 3.1.9-r**

**Puerto Rico: Non-Life ranking (without the Health line), 2017-2018 (market shares, %)**

<table>
<thead>
<tr>
<th>Company</th>
<th>2018 Market Share (%)</th>
<th>2017 Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAPFRE</td>
<td>14.5%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Universal</td>
<td>9.0%</td>
<td>9.6%</td>
</tr>
<tr>
<td>MCS</td>
<td>6.9%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Coop de seguros</td>
<td>4.4%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Triple-S</td>
<td>4.3%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Multinational</td>
<td>3.9%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Humana</td>
<td>2.6%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Chubb</td>
<td>2.6%</td>
<td>2.6%</td>
</tr>
<tr>
<td>AIG</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Assurant</td>
<td>5.5%</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Puerto Rico Insurance Commissioner’s Office)
3.2 South America

3.2.1 Colombia

Macroeconomic environment

The Colombian economy performed well in 2018 with real growth of 2.7%, compared to 1.4% the previous year (see Graph 3.2.1-a), driven by household and government consumption. The fiscal deficit for 2018 stood at 3.1% of GDP, achieving the objective established for the fiscal path set in 2011. Public debt stood at 56.1% of GDP at the close of 2018, compared to 52.8% in 2017. Meanwhile, the current account deficit amounted to 3.8% of GDP at the close of 2018 (3.3% in 2017). It is important to note that the tightening of monetary policy in the United States, with four increases in the reference rate in 2018, together with the external imbalance of the Colombian economy contributed to the downturn in the current account.

The inflation rate continued to fall, reaching 3.2% for the whole year (4.3% in 2017). This allowed the central bank to continue relaxing monetary policy by slightly dropping its intervention rate by 50 basis points, from 4.75% at the end of 2017 to 4.25% from April onward. This resulted in a reduction in the cost of debt, which improved the purchasing power of families, one of the main drivers of growth in the Colombian economy in 2018. The unemployment rate stood at 9.7%, compared with 9.4% the previous year.

ECLAC expects Colombia’s economy to continue to improve in 2019, with GDP growth of around 3.1%, boosted by the recovery in construction, which was the worst performing sector in 2018 due to delays in major infrastructure projects and low demand for housing. The IMF estimates that the economy will post 3.4% growth in 2019.

Insurance market

Growth

The Colombian insurance industry banked 27.27 trillion pesos (9.22 billion dollars) in premiums in 2018, up 4.9% in nominal and 1.6% in real terms, meaning a slight slowdown compared to the previous year (see Table 3.2.1-a and Chart 3.2.1-b).

Life insurance, which represents 31% of the entire industry, reported a nominal increase of 1.2% and a decrease of 1.9% in real terms, as a result of the downturn in pension insurance (8.2%). Meanwhile, Non-Life insurance, which accounts for 69% of the market, grew 6.6% in 2018 (3.3% in real terms), thanks to the boost
provided by Workplace accidents and Compulsory Traffic Accident Insurance (known as CTAI), the two lines of insurance with the highest premium volume. The performance of the Automobile line was more moderate than the previous year, with a nominal increase of 3.8%, compared to 13.1% in 2017. Conversely, Health [-6.2%] and Personal accident [-1.5%] had a negative impact on growth.

All of the above meant that the contribution to growth in the Colombian insurance industry in 2018 came mainly from Non-Life insurance lines, which contributed 4.5 percentage points (pp), while the Life segment contributed 0.4 percentage points [see Chart 3.2.1-c].

**Balance sheet and equity**

Chart 3.2.1-d shows the performance of the aggregate balance sheet at sector level for the Colombian insurance industry over the 2008-2018 period. Based on this information, the industry’s total assets amounted to 76.745 billion pesos [23.61 billion dollars]. Similarly, the industry’s aggregate equity stood at 13.27 billion pesos [4.08 billion dollars] for the year, an increase of 6.9% over the previous year. Aggregate capitalization levels for the Colombian insurance industry (measured as a percentage of total assets) followed a downward trend in the period under analysis, reaching 17.3% of assets by the end of 2018, the lowest figure of the last ten years, but still above the capitalization levels of other relatively more developed markets in the region, such as Mexico, Chile, and Brazil.

**Investment**

Chart 3.2.1-e shows changes in investment within the Colombian insurance industry between 2008 and 2018, while Charts 3.2.1-f and 3.2.1-g highlight the changes in the structure of the investment portfolio during that period.

As can be seen, investments of the Colombian insurance industry totaled 55.42 trillion pesos [17.05 billion dollars] in 2018, including cash and real estate (investment properties). In terms of structure, investment was concentrated in fixed income (80.1%) and, to a lesser extent (14.1%), in equity instruments.

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**Chart 3.2.1-b**

Colombia: growth developments in the insurance market, 2008-2018

(premiums, billions of pesos; annual nominal growth rates, %)

PREMIUMS

- Non-Life
- Life

GROWTH

- Total
- Life
- Non-Life

Source: MAPFRE Economic Research [with data from the Colombian Financial Superintendency]
Technical provisions

Chart 3.2.1-h shows changes in technical provisions over the 2008-2018 period, while Charts 3.2.1-i and 3.2.1-j highlight their relative composition over that period. Technical provisions amounted to 56.46 trillion pesos (17.38 billion dollars) in 2018. Of the total technical provisions, 47.6% related to Life insurance, 12.1% to provisions for unearned premiums and unexpired risks in Non-Life insurance, 34.9% to provisions for outstanding losses, 2.9% to provisions for catastrophic risks and the remaining 2.5% to other technical provisions.

Meanwhile, there was sustained absolute growth in technical provisions across the
Colombian insurance industry over the 2008-2018 period. As stated in our report for 2017, the structure highlights the events of 2015, when provisions for the Life insurance line fell, remaining at around 50% in recent years, with a slight dip in 2018. It is important to bear in mind that the fluctuations in technical provisions observed in recent years is mainly a result of the implementation and adoption of IFRS standards.

**Technical performance:**

The Colombian insurance industry ended 2018 with a positive technical result. The total combined ratio fell by 2.4 percentage points over 2017 to reach 108.9%, mainly due to an improvement in the loss ratio of 2.5 percentage points, as the expense ratio worsened by 0.2 percentage points (see Graph 3.2.1-k).

The combined ratio of companies operating in general P&C (Non-Life) also showed a positive performance. This combined ratio stood at 102.6% in 2018, as a result of an improvement in the loss ratio. Despite this, the indicator has remained above 100% over the course of the last ten years (see Graph 3.2.1-l).

**Results and profitability**

The net result of the Colombian insurance business in 2018 was 1.69 trillion pesos (572 million dollars), down 6.1% year on year (see Graph 3.2.1-m). The investment results were sufficient to offset the poor technical result, although they were lower than those of the previous year.
The sector’s profitability was down slightly compared to 2017. Thus, return on equity (ROE) was 12.7% in 2018, compared with 14.5% a year earlier. A similar situation arises with regard to return on assets (ROA), which reached 2.2% in 2018, down 0.5 percentage points on 2017.

**Insurance penetration, density and depth**

Chart 3.2.1-n shows the main structural trends shaping the development of the Colombian insurance industry over the 2008-2018 period. The penetration index (premiums/GDP) came to 2.8% in 2018, down 0.06 percentage points on the previous year. Overall, the penetration rate in the Colombian market has grown steadily since 2008, in line with the average trend reported by the Latin American insurance market as a whole, although still slightly below the absolute average values for the region.
The density indicator (premiums per capita) amounted to 549,089 pesos (186 dollars) in 2018, up 3.3% on the level reached the previous year. As with the penetration index, density in the Colombian market (measured in local currency) climbed steadily over the 2008-2018 period. However, when measured in dollars it shows a decline from 2013 through to 2016 owing to the devaluation of the Colombian peso against the US dollar, although this situation corrected itself in 2017.

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The depth (Life insurance premiums to total premiums) of the Colombian insurance market stood at 31.3% in 2018, 1.1 percentage points lower than in 2017 and 2.3 percentage points lower than in 2008. The performance of this ratio has been mixed over the last ten years, with an all-time high in 2013 (35.5%). It should also be noted that the depth index for Colombia has remained consistently below the average absolute values of the indicator of all Latin American countries.

Estimation of the Insurance Protection Gap

Chart 3.2.1-o provides an estimate of the IPG for the Colombian insurance market between 2008 and 2018. Based on this information, the IPG amounted to 48.44 trillion pesos (16.38 billion dollars) in 2018, equivalent to 1.8 times the size of the actual insurance market in Colombia at the close of that year.
Chart 3.2.1-n
Colombia: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, pesos and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Colombian Financial Superintendency)
As with the majority of Latin American insurance markets, the Life insurance segment is largely responsible for the structure and performance of the IPG over the period under analysis. Indeed, 69.4% of the IPG was a product of Life insurance (33.63 trillion pesos) at the close of 2018, up 0.9 percentage points on 2008. The remaining 30.6% of the insurance gap is attributable to the contribution of the Non-Life segment (14.81 trillion pesos). Accordingly, the potential insurance market at the close of 2018 (sum of the actual market plus the IPG), is estimated at 75.71 trillion pesos (25.6 billion dollars), equivalent to 2.8 times the size of the total insurance market that year.

Chart 3.2.1-p provides an estimate of the IPG as a multiple of the actual market in each the years under analysis, showing a sustained downward trend throughout the 2008-2018 period. Over this period, the total gap fell from 2.7 to 1.8 times the size of the actual market. Similarly, the Life insurance multiple fell from 5.5 to 3.9 and the Non-Life insurance multiple fell from 1.3 to 0.8.

Chart 3.2.1-q shows the change in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Colombian insurance market over the last ten years, comparing the situation in 2018 with the state of the market in 2008. The insurance gap as a multiple of the actual market can be seen to improve in both the Non-Life and Life segments.

Lastly, Chart 3.2.1-r shows whether the Colombian insurance market will be able to close the insurance gap, based on a comparative analysis between the growth rates observed over the last ten years and the growth rates that would be needed in order to close the 2018 gap over the coming ten years.

Our analysis shows that the Colombian insurance market registered an average annual growth rate of 10.0% over the 2008-2018 period, underpinned by average annual growth of 9.3% in the Life insurance segment and of 10.4% in the case of Non-Life insurance. Were the same rate of growth observed over the last decade to continue over the next ten years, the growth rate of the Colombian insurance market would be sufficient to close the insurance gap in the case of the Non-Life insurance segment only. For the Life insurance market, the growth rate would be 8 percentage points short of closing the gap, having worsened in comparison to 2017.
Market Development Index (MDI)

Chart 3.2.1-s provides an estimation of the Market Development Index (MDI) for the Colombian insurance industry between 2005 and 2018. Generally speaking, the MDI shows a positive trend over the period under analysis, following the average recorded by the Latin American market as a whole as reported in our 2017 report. However, there are some significant fluctuations in certain years (2007-2008; 2013-2014) as a result of atypical behavior in the growth of the Life insurance segment in the Colombian market, as explained by fluctuations in the depth index. This atypical behavior by the Life insurance segment caused considerable fluctuations in the levels of depth, which, after a significant rise in 2008, suffered setbacks in 2009-2011 and in 2014-2015 following a period of growth in Life insurance in 2013.

Comparative analysis of structural ratios

Chart 3.2.1-t summarizes the state of the Colombian market in 2018, compared with the average for Latin America and measured in terms of the various structural ratios analyzed. It shows that, although the state of the Colombian market in terms of penetration and depth and density remain below the average for Latin American insurance markets.
Insurance market rankings

Overall ranking

In 2018, there were 26 general insurance companies, 20 Life insurance companies and two insurance cooperatives operating in Colombia. In terms of structure, the Colombian insurance market continues to show low levels of concentration. This is supported by the Herfindahl and CR5 indexes shown in Chart 3.2.1-u, which reveal a steady trend. The Herfindahl index (HHI=532.6) decreased slightly in 2018, and remains well below the moderate concentration threshold. The concentration level of the top five insurance companies in the

Chart 3.2.1-r
Colombia: capacity to close the IPG, 2008-2018
(average annual growth rate, %; sufficiency or insufficiency, pp)

Source: MAPFRE Economic Research

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Life</th>
<th>Non-Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2017</td>
<td>11.8%</td>
<td>10.0%</td>
<td>13.8%</td>
</tr>
<tr>
<td>2008-2018</td>
<td>10.0%</td>
<td>9.3%</td>
<td>10.4%</td>
</tr>
</tbody>
</table>

Chart 3.2.1-s
Colombia: Market Development Index (MDI), 2005-2018
(index 2005=100; annual change)

Source: MAPFRE Economic Research

<table>
<thead>
<tr>
<th>Year</th>
<th>Colombia</th>
<th>Average LatAm</th>
<th>Annual change in the MDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2006-07</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2007-08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009-10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010-11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011-12</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2012-13</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2013-14</td>
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<td></td>
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<tr>
<td>2014-15</td>
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<tr>
<td>2015-16</td>
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<tr>
<td>2016-17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017-18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE LATIN AMERICAN INSURANCE MARKET IN 2018

The overall ranking of insurance groups in 2018 was led by Suramericana with 23.2% of total premiums, down 1.8 percentage points in market share on 2017 due to lower premium revenue from the Life insurance business. Next were Alfa (13.6%), Bolívar (8.5%) and then the state-owned company Positiva y Previsora, which maintained its share of 7.1%. Axa, Seguros del Estado and Allianz came next with market shares of about 5%. The bottom three places were held by MAPFRE, Liberty and Mundial, with quotas of 4.8%, 3.7% and 3% respectively (see Chart 3.2.1-u).

With regard to the M&A activity that took place during 2018, the agreement signed by the Zurich group with QBE in February 2018 to acquire the Australian insurer’s business in Latin America, and therefore its operations in Colombia, is of note. The Superintendency of Finance approved the acquisition at the end of that year.

The concentration index (CR5) also decreased slightly. Between them, these companies account for 41.6% of total premiums (down from 42.4% in 2017), with a higher concentration in the Life segment (73.9%) than in the Non-Life segment (39.1%). These percentages are higher when the groups in the ranking are considered rather than individual companies, although doing so does not lead to a significant increase in levels of concentration.

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Life and Non-Life rankings

As far as the Non-Life segment is concerned, Suramericana continued to top the ranking in 2018 with 26.5% of premiums, a slight decrease of 0.1 percentage points. Positiva y Previsora was in second position, and Estado was in third. Axa overtook Allianz, while Bolívar, MAPFRE, Liberty and Mundial maintained the same positions as the previous fiscal year. Riesgos Profesionales Colmena joined the 2018 ranking in tenth place, moving Equity into eleventh.

In the 2018 Life ranking, Alfa continued to hold onto the top spot, increasing its market share to 38.6% of premiums (up 2.5 percentage points on the previous year). Meanwhile, Suramericana lost part of its share, which fell to 16% compared with 21.8% in 2017, but remained in second position even as third-place Bolívar began to close the gap with 12.7% of Life premiums. The rest of the groups followed behind at some distance, from MAPFRE with 4.2% to Positiva y Previsora in tenth position with 2.4% (see Chart 3.2.1-w).

Key regulatory aspects

Lastly, Table 3.2.1-b shows the key regulatory adjustments made in 2018 and during the first half of 2019, as well as those due to take effect.

3.2.2 Venezuela

Macroeconomic environment

In 2018, the Venezuelan economy shrank by 18% in real terms (compared to 15.7% the previous year), the fifth consecutive year of recession. Consumption and investment fell still further in 2018 due to a shortage of dollars, a lack of inputs due to the closing international markets, and hyperinflation (see Chart 3.2.2-a).

In the external sector, there was a sharp decline in imports and, to a lesser extent, in exports, which are highly dependent on oil-related activities. Despite positive spikes in the price of crude oil, both production and exports by the state-owned company PDVSA continued
to decrease. The strong dependence on oil revenue also caused the fiscal deficit to suffer again due to the low capacity to collect revenue, despite the suspension of payments resulting from being held in partial default toward the end of 2017.

Finally, the monetary conversion planned by the Venezuelan government under the Program for Economic Recovery, Growth and Prosperity to fight hyperinflation came into effect in August 2018. This policy removed five zeros from the currency by introducing the sovereign bolivar, equivalent to 100,000 strong bolivars. In this context, the IMF estimates that the Venezuelan economy will shrink again in 2019, this time by around 25%.

Insurance market

Growth

Premiums in the Venezuelan insurance market experienced nominal growth of 69.51% in 2018, reaching 26.6 billion sovereign bolivars. However, if we factor out the effect of inflation, this growth becomes a decrease of 92.5% in real terms. Non-Life insurance, which accounts for 99% of all premiums, fell further and faster, showing a real decline of 92.5% (down from a fall of 62.9% the previous year). Life insurance, meanwhile, fell by a real 92.2%, compared to a fall of 66.8% in 2017 (see Table 3.2.2, and Charts 3.2.2-b and 3.2.2-c).

Balance sheet and equity

The aggregate balance sheet for the Venezuelan insurance industry between 2007 and 2017 (the latest data available) can be seen in Chart 3.2.2-d. The industry’s total assets came to 201 million sovereign bolivars, while equity amounted to 172 million sovereign bolivars, up 1375 percentage points on 2017, largely due to the effects of the hyperinflation in the economy.

The Venezuelan insurance industry presents high levels of aggregate capitalization (measured on total assets), standing at around 36% between 2008 and 2013 before increasing to 85.5% of total assets in 2017. It is important...
<table>
<thead>
<tr>
<th>Regulation</th>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Circular 006, 2018</td>
<td>Earthquake</td>
<td>Decrees 4865, 2011 and 2973, 2013, established insurance entities’ obligation to have loss estimation forms or catastrophe forms in the earthquake line. In order to comply with these Decrees, External Circular 006, 2018 was issued, through which the applicable earthquake insurance rules are provided.</td>
</tr>
<tr>
<td>External Circular 033, 2018</td>
<td>Risks</td>
<td>In order to strengthen risk-based monitoring, External Circular 033, 2018 was issued, providing instructions on reporting information related to the technical reserves applicable to the earthquake sector.</td>
</tr>
<tr>
<td>External Circular 020, 2018</td>
<td>Reinsurance</td>
<td>Through External Circular 020, 2018, the rules relating to the Register of Reinsurers and Foreign Reinsurance Brokers were amended, in order for reinsurers from abroad to inform the Colombia Financial Superintendency (SFC) at any time, the underwriting agencies, coverholders or any other person authorized to underwrite reinsurance business on behalf of the entity.</td>
</tr>
<tr>
<td>External Circular 007, 2018</td>
<td>Risks</td>
<td>In view of the increased exposure to cyber risks resulting from the boom in financial services digitalization, increased interconnectivity of agents, and the mass use of electronic channels, the 2008 External Circular 007 was issued, aimed at strengthening the management of this risk by the entities monitored.</td>
</tr>
<tr>
<td>External Circular 008, 2018</td>
<td>Payment gateways</td>
<td>External Circular 008, 2018 establishes minimum requirements for entities monitored in their operations with payment processors (payment gateways) In order to strengthen the security and quality of the information they process monitored in the operations carried out by their customers through the use of the different media and channels, particularly in virtual environments.</td>
</tr>
<tr>
<td>External Circular 037, 2018</td>
<td>Financial consumer</td>
<td>In order to generate mechanisms to improve the identification and monitoring financial consumers’ experience of insurance products, External Circular 037, 2018 was issued, through which form 537 was created, concerning the financial consumers’ experience with the insurance industry.</td>
</tr>
<tr>
<td>External Circular 029, 2018</td>
<td>Sufficient equity</td>
<td>Pursuant to Decree 415, 2018, External Circular 029, 2018 was issued, by which the criteria were established to be able to determine the weighting factor for calculating the value of the operational risk exposure by the entities monitored.</td>
</tr>
<tr>
<td>External Circular 010, 2019</td>
<td>Sufficient equity</td>
<td>In order to allow adequate supervision of the operational risk exposure, External Circular 010, 2018, was issued, containing basic guidelines on aspects related to sufficient equity of third-party asset managers.</td>
</tr>
<tr>
<td>External Circular 005, 2019</td>
<td>Cloud computing</td>
<td>In order to promote the use of cloud computing for financial service provision, responding to the digital transformation of services related to the storage, processing and use of information, External Circular 005, 2019 was issued, through with instructions on using this cloud computing service are provided.</td>
</tr>
<tr>
<td>External Draft-Third quarter 2019</td>
<td>10-year insurance</td>
<td>This External Circular aims to create a new insurance branch related to issuing insurance policies to cover the equity damages caused to owners that are affected when the building perishes or threatens ruin, pursuant to Decree 282, 2019.</td>
</tr>
<tr>
<td>External Draft-Fourth quarter 2019</td>
<td>Pension insurance</td>
<td>The issuance of this External Circular aims to continue with regulating the provisions on reserves for insurance entities incorporated into Decree 2973, 2013, specifically with respect to invalidity and survival pension insurance plans.</td>
</tr>
<tr>
<td>External Draft-Fourth quarter 2019</td>
<td>Loss experience reserve</td>
<td>This External Circular aims to provide instructions regarding contracting insurance coverage for low frequency and high severity events in the occupational risk line. General instructions are also provided for establishing loss ratio deviation reserves as a supplement to reinsurance coverage.</td>
</tr>
</tbody>
</table>
**Table 3.2.1-b (continued)**

**Colombia: recent regulatory developments in insurance matters**

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Circular Draft-Second quarter 2019</td>
<td>Risks</td>
<td>This CFS is working on issuing an External Circular that establishes a comprehensive and unique framework for managing risks inherent in the activities carried out by the monitored entities.</td>
</tr>
<tr>
<td>External Circular Draft-Second quarter 2019</td>
<td>Fiscal review</td>
<td>This SFC aims to issue an External Circular by which the regulatory framework for the fiscal review of the entities monitored is updated.</td>
</tr>
<tr>
<td>External Circular Draft-Second quarter 2019</td>
<td>Financial conglomerates</td>
<td>This External Circular aims to provide instructions related to the sufficient capital level of financial conglomerates, of which some of our insurance entities are part.</td>
</tr>
<tr>
<td>External Circular Draft-Second quarter 2019</td>
<td>Resolution plans</td>
<td>In order to continue the convergence to international standards with respect to the resolution frameworks applicable to the entities monitored, the purpose of this External Circular is to issue instructions for drafting and presenting resolution plans by some entities monitored that are selected to do so. These resolution plans are aimed at allowing the respective entities monitored and this CFS to plan actions that will achieve fast, orderly and structured resolution of an entity monitored at the time of addressing material financial stress situations.</td>
</tr>
<tr>
<td>External Circular Draft-Third quarter 2019</td>
<td>SARLAFT</td>
<td>This SFC is working on the modification of the Basic Legal Circular (BLC), concerning the instructions on managing money laundering risks and financing terrorism, with the aim of adapting this rule to international standards, always seeking to promote innovation and financial inclusion by developing technologies that make managing these risks more robust.</td>
</tr>
<tr>
<td>External Circular Draft-Second quarter 2019</td>
<td>Biometrics</td>
<td>This External Circular aims to update the strong biometric authentication mechanisms for some operations in controlled entities, including insurance entities.</td>
</tr>
</tbody>
</table>

**DECREES ISSUED**

<table>
<thead>
<tr>
<th>Decree</th>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2123</td>
<td>Insurance marketing</td>
<td>In the interest of an adequate insurance promotion scheme, Decree 2123, 2018 was issued. This Decree: (i) seeks to ensure adequate levels of suitability and professionalism of those who provide information and advice to customers or users within the framework of the insurance industry; (ii) coordinate regulation to eliminate regulatory arbitrations, with respect to the use and loan of the network by insurance entities; and (iii) make the rules more flexible in order to strengthen and promote correspondent insurance.</td>
</tr>
<tr>
<td>282</td>
<td>Insurance policies</td>
<td>In order to regulate protection measures for new home buyers, Decree 282, 2019 regulates the minimum requirements that the builder or seller of new houses must confirm to protect equity damage to the owner or successive owners in the event that the building collapses or threatens ruin, during the ten years following its delivery, due to defect of the construction or of the land. The mechanisms established include the obligation to contract an insurance policy.</td>
</tr>
<tr>
<td>415</td>
<td>Sufficient equity</td>
<td>Decree 415, 2018 updates and coordinates the existing regulation with respect to operational risk management, with the aim of incorporating better standards associated with the nature of the operations carried out by entities that manage third-party assets.</td>
</tr>
</tbody>
</table>
Decree 774, 2018 establishes rules with the aim of adapting the regulation on risk management and adequate levels of capital for financial conglomerates, taking into account the activities carried out by the entities that make up them and the risks to which they are exposed.

Decree 923, 2018, established guidelines for those entities monitored that are selected to develop and submit resolution plans for the purpose that these, together with SFC and Fogafín, are prepared to deal with stress situations considered material.

Decree 1486, 2018 regulates the criteria for determining the quality of those linked to the financial conglomerate and the financial holding, as well as establishes the criteria and mechanisms for the entities that are part of the financial conglomerate to identify, manage and disclose conflicts of interest. Finally, it establishes risk concentration exposure policies and limits for operations between entities in the financial conglomerate and between them and their associates.

This Draft Decree aims to update and collate the rules related to insurance company technical equity, in such a way that they are in line with the good practices issued on this matter. In particular, the following aspects are intended to be regulated: (i) elements of the technical assets of insurance entities, including elements similar to the Basel III Decree for credit institutions; (ii) calculating the sufficient equity underwriting risk component, to allow the total recognition of the cession of reinsurance; And (iii) calculating the adequate asset risk component of the equity, to incorporate a capital requirement for the counterparty risk exposure of the reinsurer measured on the basis of the contingencies by reinsurers supporting technical reserves.

The draft aims to move toward risk-based regulation, in accordance with the international standard of the European Solvency II Directive. The purpose is to make modifications that enable the entities to adopt the risk management culture set out in the aforementioned Directive, regulating the standards of corporate governance and the funds with which the capital requirements can be met.

The National Development Plan regulated the following aspects in the insurance industry:

(i) creates agricultural insurance involving the protection of all or part of agricultural investments financed by credit resources from the national agricultural credit system or from producer’s own resources;

(ii) creates the social protection floor for persons who have a working or service provision relationship and who, by virtue of this, receive income below 1 SMMLV. This floor of social protection is composed, among other things, of an inclusive insurance that protects the worker from the risks arising from the work activity and the diseases covered by the complementary social service for periodic economic benefits [BEPS];

(iii) includes as an objective of the intervention of the National Government in the activities related to the management, use and investment of resources collected from the public, to guarantee the sufficiency of the General System of Occupational Risks, by updating the economic activities and the contribution amounts applicable to them;

(iv) includes as the objective of the occupational risk fund the compensation to the occupational risk management entities that insure risks with high loss experience, high operating cost, or the combination of both phenomena, by means of a compensation sub-account to be financed with 50 per cent of the levy on contributions from employers and independent workers; and

(v) grants the President the authority to merge public entities in the financial sector, such as insured and fiduciary entities, as an extraordinary power in order to avoid duplication.
to recognize that much of the equity analyzed corresponds to unrealized gains in real estate investments and other financial instruments due to the hyperinflation the economy is experiencing.

Investments

Chart 3.2.2-e shows the latest available changes in investment in the Venezuelan insurance market between 2007 and 2017. In 2017, it amounted to 184 million sovereign bolivars. It has not been possible to carry out a more detailed analysis of the portfolio at sector level of Venezuela’s insurance industry.

Technical provisions

Changes in technical provisions and net reinsurance provisions for the Venezuelan insurance industry between 2007 and 2017 (latest data available) can be seen in Chart 3.2.2-f. In 2017, technical provisions stood at 14.2 million sovereign bolivars. Life insurance accounted for only 0.6% of this total, while 69.4% related to provisions for unearned premiums and unexpired risks in Non-Life insurance, 23.4% to the provision for outstanding losses, 0.9% to the provision for catastrophic risks and the remaining 5.7% to other technical provisions.
As shown in Chart 3.2.2-g, the relative weight of Life insurance provisions fell from 1.2% of total provisions in 2008 to 0.6% in 2017. Between 2007 and 2017 there was also a gradual increase in the weight of provisions for unearned premiums and unexpired risks, from 54% of total provisions in 2008 to 69.4% in 2017. On the other hand, provision for outstanding losses fell from around 40% between 2008 and 2012 to 23.4% in 2017 [see Chart 3.2.2-h].

**Technical performance**

Based on the latest information available, the Venezuelan insurance industry registered a negative technical result in 2017, with a combined ratio of 111.14%, a deterioration of 3.2 percentage points in relation to 2016. Despite the improved loss ratio (-7.3%), the expense ratio increased by 10.5 percentage points.

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**Table 3.2.2**

<table>
<thead>
<tr>
<th>Line</th>
<th>Millions of sovereign bolivars</th>
<th>Millions of USD</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal (%)</td>
<td>Real (%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26,591</td>
<td>379</td>
<td>-92.5</td>
</tr>
<tr>
<td>Life</td>
<td>279</td>
<td>4</td>
<td>-92.2</td>
</tr>
<tr>
<td>Non-Life</td>
<td>26,312</td>
<td>375</td>
<td>-92.5</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)
points, leading to the deterioration of the combined ratio (see Chart 3.2.2-i).

**Results and profitability**

The Venezuelan insurance industry posted a consolidated result of 23.96 billion bolivars (342 million dollars) for 2018. As there is no available balance sheet data for 2018, profitability indicators for that year could not be analyzed. As can be seen in Chart 3.2.2-j, there was a clear negative trend in the profitability of the Venezuelan insurance industry between 2008 and 2017, starting in 2012 and reaching the lowest level for the decade in 2017.

**Insurance penetration, density and depth**

The main structural trends shaping the development of the Venezuelan insurance industry between 2008 and 2018 can be seen in Chart 3.2.2-k. The penetration index (premiums/GDP) came to 0.4% in 2018, down...
Chart 3.2.2-e
Venezuela: insurance market investment, 2008-2018
(million sovereign bolivares)

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)

Chart 3.2.2-f
Venezuela: technical provisions of the insurance market, 2008-2018
(million sovereign bolivares)

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)

Chart 3.2.2-g
Venezuela: structure of technical provisions, 2008-2017 (%)

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)

Chart 3.2.2-h
Venezuela: structure of technical provisions, 2017*
(%)}

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)

*Last data available
As stated in our 2017 report, following a period of contraction between 2009 and 2011, the indicator showed an upward trend until 2014, only to then quickly fall again from that year on.

Insurance density in Venezuela (premiums per capita) reached 920.5 sovereign bolivars (13.1 dollars), up 70,750% on 2017 (1.3 sovereign bolivars). This was also influenced by the trend in the general level of prices in the economy. Accordingly, density has climbed steadily over the last decade when measured in local currency, rising exponentially from 2013. However, when the index is calculated in dollars to remove the hyperinflationary effect, density has been clearly declining.

With regard to depth (Life insurance premiums to total premiums), the indicator in 2018 stood at just 1%, 1.5 percentage points below the value observed in 2008. The trend in the depth of the Venezuelan insurance market clearly diverges from the average performance of the other insurance markets in Latin America, as the Life insurance segment has virtually disappeared.

**Estimation of the Insurance Protection Gap**

Chart 3.2.2-l provides an estimation of the insurance gap for the Venezuelan insurance market in 2018. The IPG in 2018 amounted to 504 billion sovereign bolivars, 19 times the size of the Venezuelan insurance market at the close of that year. The structure and performance of the IPG are largely a product of Life insurance. At the close of 2018, 58.6% of the IPG corresponded to the Life insurance segment. The potential insurance market in Venezuela at the end of 2018 (estimated as the sum of the real insurance market plus the IPG) would be 531 billion sovereign bolivars, almost 20 times the size of the total insurance market that year.

Chart 3.2.2-m provides an estimation of the IPG as a multiple of the real insurance market in Venezuela. As can be seen, the insurance gap as a multiple of the actual market (concentrated in the Life insurance segment) followed an upward trend between 2008 and 2018, from 1.5 to 19 times size of the market.
Market Development Index (MDI)

An estimation of the Market Development Index (MDI) for the Venezuelan insurance industry can be seen in Chart 3.2.2-n. Generally speaking, the indicator showed a trend in line with the average trend in Latin America until 2014, when it then entered a marked decline.

Comparative analysis of structural ratios

Finally, Chart 3.2.2-o outlines the state of the Venezuelan insurance market when compared with the average for Latin America, measured in terms of the structural indicators analyzed. As can be seen, the deterioration of the Venezuelan insurance market has caused all of its structural dimensions to fall well below the average for the region.

Insurance market rankings

Overall ranking

There were 45 insurance companies operating in Venezuela in 2018, the same number as the previous year. Overall, market concentration is
Chart 3.2.2-k
Venezuela: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, sovereign bolivares and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)
low and has remained stable over the past few years (see Chart 3.2.2-p). The Herfindahl index stood at 733 points in 2018, below the moderate concentration threshold of 1500, while the CR5 index stood at 52%, showing a relative level of concentration in the Life insurance segment.

The 2018 overall ranking of insurance groups (see Chart 3.2.2-q) was led by Mercantil with a market share of 11.6%. It was followed by Horizonte (11.6%) and Oceánica de Seguros (10.8%), which overtook Universitas (9.5%). MAPFRE was in fifth position with 8.5%, ahead of Liberty Mutual (7.8%), Pirámide (7.1%), Constitución (5.4%), Estar Seguros (2.9%) and Hispania de Seguros (2.8%).

Life and Non-Life rankings

The 2018 Non-Life ranking was led by Mercantil with a market share of 11.7%, followed by
Horizonte (11.4%) and Oceánica de Seguros (10.9%).

Meanwhile, in the 2018 Life insurance ranking, first place was held by Horizonte with a share of 32.6%, while MAPFRE (18.5%) and Zurich (8.1%) were in second and third place respectively (see Chart 3.2.2-r).

**Key regulatory aspects**

Key regulatory aspects relating to the Venezuelan insurance market are listed below: (1) Administrative Ruling No. FSAA-DL-2-0035 (Gazette No. 41,501 of January 31, 2018), establishing the principles, the general criteria for development and the minimum structure for actuarial regulations, and (2) Administrative Ruling No. FSAA-DL-2-00454 (Gazette No. 4150 and No. 41,556), establishing regulations for the presentation of financial statements every month, year and after a general inspection for the insurance companies authorized to operate in Venezuela. These companies must use the Analytical Financial Statements System (SEFA).

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**Chart 3.2.2-o**

Venezuela: comparative structural coefficient index* vs. Latin America average, 2018

* Indexes calculated as the quotient between the values of the country’s structural coefficient and the average values of the coefficient concerned for the Latin American market as a whole. The unit represents a performance equivalent to the region’s average.

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**Chart 3.2.2-p**

Venezuela: insurance industry concentration, 2008-2018

(Herfindahl index; CR5 index, %)

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)
THE LATIN AMERICAN INSURANCE MARKET IN 2018

**Chart 3.2.2-q**
Venezuela: overall ranking, 2017-2018
(market shares, %)

- **Mercantil**: 2018 - 11.6%, 2017 - 11.6%
- **Horizonte**: 2018 - 10.8%, 2017 - 5.5%
- **Oceánica de Seguros**: 2018 - 7.1%, 2017 - 2.9%
- **MAPFRE**: 2018 - 7.8%, 2017 - 7.1%
- **Universitas**: 2018 - 5.4%, 2017 - 5.4%
- **Liberty Mutual**: 2018 - 7.1%, 2017 - 2.2%
- **Pirámide**: 2018 - 2.8%, 2017 - 2.8%
- **Constitución**: 2018 - 2.9%, 2017 - 5.4%
- **Estar Seguros**: 2018 - 2.8%, 2017 - 2.8%
- **Hispana de Seguros**: 2018 - 2.8%, 2017 - 2.8%

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)

**Chart 3.2.2-r**
Venezuela: Life and Non-Life ranking, 2017-2018
(market shares, %)

- **LIFE**
  - **Horizonte**: 2018 - 32.6%, 2017 - 18.5%
  - **MAPFRE**: 2018 - 11.7%, 2017 - 11.4%
  - **Zurich**: 2018 - 8.1%, 2017 - 7.9%
  - **Banesco Seguros**: 2018 - 6.5%, 2017 - 6.0%
  - **Provincial**: 2018 - 6.0%, 2017 - 6.0%
  - **Mercantil**: 2018 - 3.1%, 2017 - 3.1%
  - **Liberty Mutual**: 2018 - 2.2%, 2017 - 2.1%
  - **Universitas**: 2018 - 2.1%, 2017 - 2.1%
  - **Constitución**: 2018 - 1.9%, 2017 - 1.9%

- **NON-LIFE**
  - **Mercantil**: 2018 - 11.7%, 2017 - 11.4%
  - **Horizonte**: 2018 - 10.9%, 2017 - 9.6%
  - **Oceánica de Seguros**: 2018 - 8.4%, 2017 - 8.4%
  - **Universitas**: 2018 - 7.8%, 2017 - 7.8%
  - **MAPFRE**: 2018 - 7.1%, 2017 - 7.1%
  - **Liberty Mutual**: 2018 - 5.4%, 2017 - 3.0%
  - **Pirámide**: 2018 - 3.0%, 2017 - 2.8%
  - **Constitución**: 2018 - 2.8%, 2017 - 2.8%
  - **Estar Seguros**: 2018 - 2.8%, 2017 - 2.8%
  - **Hispana de Seguros**: 2018 - 2.8%, 2017 - 2.8%

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)

*The figures for the Life and Non-Life branches are estimates*
3.2.3 Brazil

Macroeconomic environment

The Brazilian economy had an estimated GDP growth in real terms of 1.1% in 2018, similar to that recorded in 2017. This fell far below the level needed to compensate for the sharp fall it had suffered in the previous two years, which totaled almost 7 percentage points (see Chart 3.2.3-a). As in 2017, this increase in economic activity was largely a product of domestic demand, through positive investment, consumption and export data, although the latter was offset by a significant increase in imports. This had a negative impact on the current account deficit, which stood at 0.8% of GDP by the end of 2018, compared with 0.4% in 2017, largely financed by foreign direct investment. The agriculture sector suffered a slight setback in 2018 in contrast with the record increase the previous year, but it remained at a high level. The other sectors also experienced positive growth, with the sole exception of the construction sector.

The fiscal deficit stood at 7.1% of GDP, a further improvement on the previous year’s figure of 7.8%. Gross public debt at the close of 2018 came to 77% of Brazilian GDP (compared with 74% in 2017), meaning structural reforms are still needed to help balance out the public accounts, especially with regard to tax and pension systems.

The average inflation rate in 2018 stood at 3.7%, a slight increase on the 3.4% reported in 2017, yet still below the Central Bank target of 4.5%. In this context, decisions on monetary policy came in response to the trend of low inflationary pressure, with an intervention rate of 6.5% at the end of the year (compared with 7% the year before). Meanwhile, the average unemployment rate stood at 12.3% in 2018, compared with 12.7% in 2017.

Taking recent economic performance into account, MAPFRE Economic Research has revised its growth forecast to 1% in 2019, while the IMF and ECLAC both predict growth of 0.8% for this year.

Insurance market

Growth

The premium volume of the Brazilian insurance market fell by a nominal 0.9% and 4.4% in real terms in 2018, amounting to 210.32 billion reais (57.57 billion dollars). This is the result of a fall in premiums in the Life segment caused by the fall in sales of VGBL insurance (a drop of 8.5% in nominal terms), following the moderation recorded the previous year. Among the reasons...
for this decrease in sales of VGBL products (Vida gerador de benefício livre) are the fall in interest rates and a strong appreciation and attraction toward financial assets in the capital market. On the other hand, individual and group Life insurance performed positively, with growth of 11.3% in nominal terms and 7.4% in real terms. Total premiums in the Life sector amounted to 129.98 billion reais (35.58 billion dollars) in 2018, a drop of 4.2% in nominal terms and 7.6% in real terms compared with 2017 (see Table 3.2.3-a and Chart 3.2.3-b).

Non-Life insurance premiums reached 80.34 billion reais in 2018 (21.99 billion dollars), a nominal increase of 5.1% (up 2.3% on 2017) and a real increase of 1.4% (down 1.1% on 2017). In absolute values, the Automobile and Fire insurance lines contributed the most to this growth, and in relative terms Transport has also made a significant contribution, with an increase of 15.2% (see Chart 3.2.3-c). All business lines apart from specialty risks reported nominal growth, although when discounting the effect of inflation, the Automobile and Transport lines also showed a decline.

However, if, in addition to the volume of insurance premiums, Private Pension contributions received by insurers, Health insurance premiums (under the control of the Agência Nacional de Saúde Suplementar, ANS) and Capitalization regime premiums are taken into account, total revenue in 2018 amounted to 287.78 billion reais (78.77 billion dollars), a slight nominal increase of 0.5% compared with the previous year (see Table 3.2.3-b).

Balance sheet and equity

Chart 3.2.3-d shows changes in the aggregate balance sheet for all insurance companies operating in Brazil between 2008 and 2018. As demonstrated, total assets came to 1.1 trillion reais (282.62 billion dollars). Equity,

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Table 3.2.3-a
Brazil: premium volume by line of business, 2018

<table>
<thead>
<tr>
<th>Line</th>
<th>Millions of reais</th>
<th>Millions of USD</th>
<th>Increase Nominal (%)</th>
<th>Increase Real (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>210,319</td>
<td>57,567</td>
<td>-0.9</td>
<td>-4.4</td>
</tr>
<tr>
<td>Life</td>
<td>129,975</td>
<td>35,576</td>
<td>-4.2</td>
<td>-7.6</td>
</tr>
<tr>
<td>Individual and Group Life</td>
<td>32,340</td>
<td>8,852</td>
<td>11.3</td>
<td>7.4</td>
</tr>
<tr>
<td>FBGL2</td>
<td>97,635</td>
<td>26,724</td>
<td>-8.5</td>
<td>-11.7</td>
</tr>
<tr>
<td>Non-Life</td>
<td>80,344</td>
<td>21,991</td>
<td>5.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Automobiles</td>
<td>40,477</td>
<td>11,079</td>
<td>2.0</td>
<td>-1.6</td>
</tr>
<tr>
<td>Other lines</td>
<td>14,056</td>
<td>3,847</td>
<td>9.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Accidents</td>
<td>5,602</td>
<td>1,533</td>
<td>5.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Fire</td>
<td>5,882</td>
<td>1,610</td>
<td>14.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Transport</td>
<td>3,567</td>
<td>976</td>
<td>15.2</td>
<td>11.1</td>
</tr>
<tr>
<td>Credit and Surety</td>
<td>4,261</td>
<td>1,166</td>
<td>9.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3,549</td>
<td>971</td>
<td>7.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>1,759</td>
<td>481</td>
<td>9.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Transport Hull</td>
<td>710</td>
<td>194</td>
<td>1.4</td>
<td>-2.0</td>
</tr>
<tr>
<td>Special risks2</td>
<td>-103</td>
<td>-28</td>
<td>-139.4</td>
<td>-138.0</td>
</tr>
<tr>
<td>Burial</td>
<td>584</td>
<td>160</td>
<td>10.3</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)
1/ Written Premium (on funding basis) + Insurance Premium
2/ Free Benefit Generator Life (FGBL)
3/ Oil, nuclear risks and satellites
meanwhile, amounted to 84.52 billion reais (21.82 billion dollars), a 3.1% decrease compared with the value in 2017.

Aggregate capitalization levels within the Brazilian insurance industry (measured on total assets) have been decreasing steadily since 2008, with relative values of around 20% of total assets in 2008 and of 7.7% in 2018.

Investments

The performance and structure of the aggregate investment portfolio at sector level for the Brazilian insurance industry between 2008 and 2018 can be seen in Charts 3.2.3-e, 3.2.3-f and 3.2.3-g. In 2018, investment amounted to 985.31 billion reais, (254.31 billion dollars), mostly concentrated in mutual funds (89.1%) and, to a much lesser extent, in debt instruments (7.8%), equity (2.9%) and cash and financial investments (0.3%). As mentioned in previous versions of this report, the high percentage of investment managed through mutual funds is of note. This increased in both absolute and relative terms in comparison with other investments during the period under analysis.

Finally, Table 3.2.3-c presents changes in the structure of investment, but in this case through analysis of the underlying assets managed through mutual funds. These are also concentrated in fixed income instruments, which account for 95.4% of investment.
Technical provisions

Charts 3.2.3-h, 3.2.3-i and 3.2.3-j show the performance and relative structure of technical provisions in the Brazilian insurance industry between 2008 and 2018. As can be seen, technical provisions amounted to 965.97 billion reais (249.32 billion dollars) in 2018. That year, the Life business accounted for about 92.1% of total provisions if the percentage of provisions under the pension business is included.

It should be noted that although VGBL insurance is included as an insurance product for regulatory and fiscal reasons, its nature is closer to that of a pension product. Taking this into account, if provisions for this product are grouped with other pension products, these provisions can be seen to have increased from 82.9% in 2008 to 87.7% of the total in 2018 [see Chart 3.2.3-i].

Technical performance

As shown in Chart 3.2.3-k, the total combined ratio for the Brazilian insurance industry improved by 1.9 percentage points in 2018 when compared with the previous year (91.8% compared with 93.7% in 2017). This is due to an improvement of 2.6 percentage points in the loss ratio, which stood at 41.7%, and an increase in operating expenses of 0.7 percentage points.

![Chart 3.2.3-d](image-url)
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Chart 3.2.3-e
Brazil: insurance market investment, 2008-2018 (billions of reals)

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)

Table 3.2.3-c
Brazil: evolution of the structure of investments by underlying assets, 2008-2018 (composition, %)

<table>
<thead>
<tr>
<th>Year</th>
<th>Income fixed</th>
<th>Variable income</th>
<th>Real estate</th>
<th>Other investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>88.5%</td>
<td>9.1%</td>
<td>0.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td>2009</td>
<td>86.3%</td>
<td>12.3%</td>
<td>0.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td>2010</td>
<td>86.9%</td>
<td>11.6%</td>
<td>0.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>2011</td>
<td>89.2%</td>
<td>9.4%</td>
<td>0.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>2012</td>
<td>89.4%</td>
<td>9.4%</td>
<td>0.4%</td>
<td>0.9%</td>
</tr>
<tr>
<td>2013</td>
<td>91.3%</td>
<td>7.1%</td>
<td>0.4%</td>
<td>1.1%</td>
</tr>
<tr>
<td>2014</td>
<td>93.3%</td>
<td>5.5%</td>
<td>0.4%</td>
<td>0.9%</td>
</tr>
<tr>
<td>2015</td>
<td>94.7%</td>
<td>4.0%</td>
<td>0.3%</td>
<td>1.0%</td>
</tr>
<tr>
<td>2016</td>
<td>95.1%</td>
<td>4.3%</td>
<td>0.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>2017</td>
<td>95.2%</td>
<td>4.3%</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>2018</td>
<td>95.4%</td>
<td>4.1%</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)

*The percentages shown on the graph may not add up to 100% due to rounding.

Chart 3.2.3-f
Brazil: structure of investment, 2008-2018 (%)

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)

Chart 3.2.3-g
Brazil: structure of investment, 2018 (%)

Debt 89.1%
Equity 2.9%
Real estate 0.30%
Investment funds 7.8%
Other 0.30%

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)
Results and profitability

Due mainly to the improvement of the Brazilian insurance market’s technical performance, insurance companies posted a net result of 18.82 billion reais (5.15 billion dollars) in 2018, an increase of 8.7%. Investment made a positive contribution, although somewhat less than in the previous fiscal year (see Chart 3.2.3-i).

The profitability of the Brazilian insurance industry improved in 2018. Return on equity (ROE) was 22.3% compared to 19.8% in 2017, while return on assets (ROA) reached 1.7% in 2018, almost exactly the same as the previous year.

Insurance penetration, density and depth

Chart 3.2.3-m shows the main structural trends shaping the development of the Brazilian insurance industry over the last
decade. Firstly, the penetration index (premiums/GDP) in 2018 reached 3.1%, up 0.9 percentage points on 2008 but down 0.1 percentage points on 2017. This was influenced by the decline in premiums in the Life insurance segment as discussed previously. From a medium-term standpoint, the penetration index for the Brazilian market (which only takes premiums from insurance activity into account) grew steadily between 2008 and 2016, in line with the average trend recorded for the Latin American insurance market as a whole. Since that year, however, the indicator has begun to fall.

Meanwhile, the level of insurance density (premiums per capita) amounted to 1004.1 reais (274.8 dollars), down 1.6% on the value recorded in 2017 (1020.8 reais). As with the penetration index, density in Brazil (measured in local currency) climbed steadily over the decade, with a slight slowdown from 2016.
Finally, in terms of depth (Life insurance premiums to total premiums), the indicator for 2018 came to 61.8%, up 12.5 percentage points on the value observed in 2008 (higher than average values recorded across the Latin American region), but down 2.2 percentage points on the previous year.

**Estimation of the Insurance Protection Gap**

Chart 3.2.3-n provides an estimation of the insurance gap for the Brazilian insurance market between 2008 and 2018. The IPG came to 314.5 billion reais (86.08 billion dollars) in 2018, equivalent to 1.5 the size of the actual insurance market in Brazil at the end of that year. Meanwhile, in terms of structure, 51.6% of the IPG related to Life insurance in 2018 (162.4 billion reais), while the Non-Life insurance segment accounted for the remaining 48.4% of the gap (152.1 billion reais). It should be noted that the share of Life insurance in the IPG fell by nearly 11 percentage points between 2008 and 2018. The potential insurance market in Brazil in 2018 (sum of the actual market plus the IPG) was estimated at 524.8 billion reais (143.65 billion dollars), 2.5 times the size of the total insurance market in Brazil in that year.

Chart 3.2.3-o provides an estimation of the IPG as a multiple of the actual insurance market. While the insurance gap multiple fell steadily over the period under analysis, an upturn has been noted in recent years, beginning in 2017 in the Life segment and in 2014 in the Non-Life segment. From a medium-term standpoint, the total IPG fell from 2.7 to 1.5 times the size of the actual market between 2008 and 2018, the multiple for the Life market falling from 3.5 to 1.2 and for the Non-Life market falling from 2.0 to 1.9 times.

Chart 3.2.3-p summarizes changes in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Brazilian insurance market between 2008 and 2018. As can be seen, the Life insurance business saw a substantial improvement in closing the gap over the period. The same cannot be said for the Non-Life segment, where the IPG fell only slightly.

Finally, Chart 3.2.3-q provides an overview of the capacity of the Brazilian insurance market to close the insurance gap determined in 2018, based on a comparative analysis of the growth rates observed over the last ten years with respect to the growth rates that would be required to close this gap over the next ten years. Between 2008 and 2018, the Brazilian insurance market expanded to an average annual growth rate of 12%; 14.6% in the Life insurance segment and 8.9% in the Non-Life segment. Based on the analysis shown in Chart 3.2.3-q, were the same rate of growth to continue over the next ten years, the growth rate of the Brazilian insurance market would be sufficient to close the insurance gap in the Life segment, but not in the Non-Life segment, in which projected growth would be 2.4 percentage points short of the rate needed.

**Market Development Index (MDI)**

Chart 3.2.3-r provides an estimation of the Market Development Index (MDI) for the Brazilian insurance industry. This is used as an indicator in this report to measure the trends shaping the development and maturity of insurance markets.

In this case, the MDI shows a generally positive trend between 2008 and 2018, ahead of the average trend across Latin America during that period. However, in line with the performance of the market and the insurance gap, there was a retraction of the index between 2017 and 2018.

**Comparative analysis of structural ratios**

Finally, Chart 3.2.3-s summarizes the state of the Brazilian insurance market in comparison with the average for Latin America, measured in terms of the four structural indicators.
Chart 3.2.3-m
Brazil: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, real and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)
analyzed: penetration, density, depth and MDI. As stated in last year’s report, it is plain to see that the Brazilian market exceeds the regional average in all dimensions, especially in terms of depth and MDI.

Insurance market rankings

Overall ranking

In 2018, 122 insurance companies were operating in the Brazilian insurance industry, two more than in 2017. Over the last ten years, market concentration had been growing steadily, but began to fall from 2017 onwards. While the Herfindahl index remained below the theoretical threshold indicative of a moderate level of concentration, it followed an upward trend during the period under analysis although it dipped in 2017 and 2018. The same is true of the CR5 index, which followed a similar trend in the Life insurance segment, although not in the Non-Life segment (see Chart 3.2.3-t).
The overall ranking of insurance groups operating in the Brazilian market was again led by Bradesco with 17.4% of market premiums, while Brasilprev remained in second position with a share of 15.1%. These two groups account for a significant volume of VGBL insurance premiums, which performed negatively in 2018 and influenced the fall in market share of both companies. These were followed by Caixa, which had grown enough to overtake Itaú and push it into fourth position. The rest of the ranking remained the same as in 2017 (see Chart 3.2.3-u).

Life and Non-Life rankings

In terms of the Non-Life group ranking, Porto Itaú was in first position with 15.6% of total market premiums. It was followed by MAPFRE with 13.3% and Bradesco with 8.2%. Zurich and Tokio remained fourth and fifth. Lower down the table, SulAmerica, Talanx and Liberty ascended one position each as Caixa slipped down to ninth position. In tenth place was Allianz, with a 3.7% share.

In the Life groups ranking, Brasilprev continued to hold the top spot with a market share of 24.5% in 2018. Bradesco came next with 23.1%, followed by Itaú with a share of 14.9% and Caixa with 14.2%. These four groups accounted for 77% of premiums between them. Further down the table, the only change from last year’s ranking was in the last two places, in which Cardif and Safra swapped places (see Chart 3.2.3-v).

Source: MAPFRE Economic Research
Key regulatory aspects

During 2018, the National Board of Private Insurance (CNSP) and the Superintendency of Private Insurance (SUSEP) made various changes to regulations governing the operation of the Brazilian insurance market, which are listed below. Those relating to the CNSP are as follows:

- Resolution 372 of December 14, 2018: establishing the minimum requirements to adopt under the agricultural insurance scheme Rural Variable Risk Insurance (“MultiSeg-Rural”).


- Resolution 332: on personal damages covered, indemnification, regulations on claims, premiums, tariff conditions and the administration of resources for the Compulsory Insurance for Personal Damage caused by Land Motor Vehicles or
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their Cargo to People On Board or Not On Board (DPVAT Insurance).

- Resolution 370 of December 13, 2018: establishing operating conditions for insurance companies that specialize in annuities and other provisions.


- Resolution 296/13: setting rules and criteria for warranty extension insurance when acquiring the product or during the validity of the provider warranty, and introducing further measures.

![Chart 3.2.3-t](image)

**Brazil: insurance industry concentration, 2008-2018**

(Herfindahl index; CR5 index, %)

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)

![Chart 3.2.3-u](image)

**Brazil: overall ranking, 2017-2018**

(market shares, %)

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)
• Resolution 306/14: establishing regulations on the payment of premiums for extended warranty insurance and insurance purchased from insurance representatives, and introducing further measures.


• Resolution 321/15: on technical provisions, assets which reduce the need for technical provision coverage, venture capital based on underwriting risks and credit, operational and market risks, adjusted equity, minimum required capital, solvency regulation systems, retention limits, investment criteria, accounting standards, independent accounting and actuarial audits and the Auditing Committee for insurance companies, open supplementary welfare companies, capitalization corporations and reinsurers.


• Resolution 241/11: on the transfer of risks, reinsurance and retrocession operations, people not covered by points I and II of Article 9 of Complementary Law 126 of January 15, 2007, and the criteria to assess shortfalls in the capacity of the reinsurance market.

• Resolution 365 of October 11, 2018: establishing rules and criteria for the operation of credit insurance, and introducing other measures.

• Resolution 364 of October 11, 2018: on Third-Party Liability Insurance for Carriers of Road Passengers.

• Resolution 363 of October 11, 2018: on operations for the assumption of reinsurance and retrocession of foreign cedants by local reinsurers, its brokerage and other measures.

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- **Resolution 117/04:** amending and consolidating rules and criteria on the functioning and operation of risk coverage offered in personal insurance plans and introducing other measures.

- **Resolution 201/08:** amending and consolidating rules and criteria on the functioning and operation of death and disability coverage offered in open pension plans and introducing other measures.


Furthermore, the following Circulars issued by the SUSEP during 2018 are noteworthy:

- **SUSEP Circular 583 of December 19, 2018:** amending SUSEP Circular 517 of July 30, 2015 and providing for technical provisions; testing liability adequacy; loss reserve reductions; venture capital based on underwriting risks and credit, operational and market risks; creating a database of operational losses; the solvency regulation plan; the registering, safekeeping and movement of assets; bonds and equities that guarantee technical provisions; the Regular Information Form (FIP/SUSEP); Accounting Standards and independent accounting audits of insurers, open supplementary welfare companies, capitalization corporations and reinsurers; the certification exam and continuous professional training for independent accounting auditors; and the Technical Declarations rolled out by the Brazilian Institute of Actuarial Science (IBA).

- **SUSEP Circular 582 of December 19, 2018:** amending SUSEP Circulars 569 of May 2, 2018 and 576 of August 28, 2018.

- **SUSEP Circular 569/18:** providing for the functioning of capitalization, modalities, preparation, operation and sale of Capitalization Certificates and establishing other provisions.

- **SUSEP Circular 576/18:** amending SUSEP Circular 569 of May 2, 2018, introducing regulations for the production, operation, advertising and marketing materials for capitalization certificates, and introducing other provisions.

- **SUSEP Circular 581 of December 19, 2018:** introducing a biometric table to display the structures of the different risk coverages offered in the supplementary variable capital pension plans and in personal insurance plans, and introducing other provisions.

- **SUSEP Circular 580 of December 13, 2018:** establishing the Permanent Insurance Committee DPVAT.

- **SUSEP Circular 579 of November 13, 2018:** amending SUSEP Circular 535 of April 28, 2016, which establishes the codification of lines of insurance and provides for the classification of different types of coverage contained in insurance plans for accounting purposes.

- **SUSEP Circular 578 of September 26, 2018:** amending SUSEP Circular 574 of August 17, 2018, which provides for the nature and essential characteristics of expenses to be financed by DPVAT revenue.

- **SUSEP Circular 577 of September 26, 2018:** amending SUSEP Circular 477 of September 30, 2013, which provides for Guarantee Insurance, publishing the Standardized Conditions and setting out other provisions.

- **SUSEP Circular 576 of August 28, 2018** [Consolidated]: amending SUSEP Circular 569 of May 2, 2018 and establishing regulations for the production, operation,
advertising and marketing materials for capitalization certificates, and introducing other provisions.

- SUSEP Circular 575 of August 17, 2018: amending SUSEP Circular 517 of July 30, 2015 [see Circular 583 of December 19, 2018].

- SUSEP Circular 574 of August 17, 2018 [Consolidated]: providing for the nature and essential characteristics of expenses to be financed by DPVAT revenue.

- SUSEP Circular 573 of August 7, 2018: amending SUSEP Circular 435 of May 25, 2012, laying out the conditions for the constitution, organization, operation, functioning and termination of self-regulating companies, as SUSEP subsidiary bodies, and for the operation of self-regulatory activities in the insurance brokerage market, reinsurance, capitalization and open pension funds, referred to in CNSP Resolution No. 233 of April 1, 2011.


- SUSEP Circular 571 of June 22, 2018: providing for livestock insurance and animal insurance.

- SUSEP Circular 570 of May 22, 2018: governing the sending of information about agreements established with foreign insurance companies, such as insurers Green Card, Blue Card and RCTR-VI-C.

- SUSEP Circular 569 of May 2, 2018 [Consolidated]: providing for the functioning of capitalization, modalities, preparation, operation and sale of Capitalization Certificates and establishing other provisions.


Finally, the following Circulars issued by SUSEP in 2019:

- SUSEP Circular 567 of February 27, 2018: preventing the re-registration of insurance brokers.

- SUSEP Circular 587 of June 10, 2019: providing for the regulations and criteria for the development and marketing of rental guarantee insurance plans.


- SUSEP Circular 563/17: amending and consolidating rules and supplementary criteria on the functioning and operation of coverage for survivors offered in supplementary open pension plans, and introducing other provisions.

- SUSEP Circular 564/17: amending and consolidating rules and supplementary criteria on the functioning and operation of coverage for survivors offered in personal insurance plans, and introducing other provisions.

- SUSEP Circular 584 of January 15, 2019: changing the deadline for the re-registration of brokerage firms.

3.2.4 Ecuador

Macroeconomic environment

The Ecuadorian economy grew 1.1% in real terms in 2018, compared with 2.4% in 2017 [see Chart 3.2.4-a]. This slowdown in growth was largely driven by the effect of Ecuador’s fiscal consolidation in 2018, with a significant reduction in non-financial public sector
spending of over 2%, in contrast to the year before, in which a strong fiscal stimulus was implemented. Public debt came to 45.2% of GDP at the end of 2018 (up from 44.7% in 2017).

The most lively sectors were aquaculture and shrimp farming, as well as electricity and water. The increase in oil prices in 2018 improved the oil trade balance, but this improvement was accompanied by a deterioration of the non-oil trade balance, resulting in a deficit in the 2018 trade balance. The current account also deteriorated, with a deficit of 1.4% of GDP at the close of 2018 (compared with 0.5% in 2017).

The average inflation rate continued to fall, just dropping into deflationary territory with a rate of -0.2%, compared with +0.4% in 2017. Unemployment fell to 4.1%, down from 4.4% the previous year.

By 2019, ECLAC estimates that the Ecuadorian economy will post a reduction in growth to 0.2%, due to renewed pressure against the fiscal stimulus, a lower and more volatile price of oil, the renewed transfer of resources to the Ecuadorian Social Security Institute (1.1% of GDP) and the Organic Law for the Comprehensive Planning of Special Amazonian Territorial Constituency (0.2% of GDP). However, there are two factors which could mitigate this phenomenon, at least partially. Firstly, an increase in Petroecuador’s production, which could produce up to 10% more barrels daily as a result of production in the Ishpingo, Tambococha and Tiputini fields (ITT); and secondly, private investment in natural gas of 1 billion dollars, by means of a tender within the fields that will be awarded in March, and five large mining projects totaling 6.81 billion dollars, although it is difficult to predict what proportion will be spent during 2019. Finally, the incentives approved in the Organic Law for Productive Development, Investment Attraction, Employment Generation and Stability and Fiscal Balance, although partial, could help to reinvigorate different sectors of the economy. The IMF, meanwhile, predicts an economic contraction in Ecuador of 0.5% in 2019.

Insurance market

Growth

Premium volume in the Ecuadorian insurance market increased by 3.6% in nominal terms in 2018 and 3.8% in real terms to reach 1.69
billion dollars, reinforcing the recent turnaround from the downward trend of the years before. Premiums in the Non-Life segment, which accounts for 76% of the market share, increased by 1.2%, while premiums in the Life insurance segment increased by 11.6%. Both individual and group insurance saw growth, although group insurance made the biggest contribution to overall growth with 93% of the Life insurance business (see Table 3.2.4 and Chart 3.2.4-b). In terms of the Non-Life business line, the growth reported in Fire, theft and allied lines (20.4%), Personal accident (6.3%), Health (5.3%) and Third-party liability (13%) offset the decline seen in the other lines, mainly Transport (down 13.2%) and Other damages (down 19.2%).

Of the 3.6% growth registered by the Ecuadorian insurance market in 2018, the Life insurance segment contributed 2.6 percentage points. This exceeded the contribution of the Non-Life segment which stood at 0.9 percentage points, a positive contribution following three years in which this segment made a negative contribution to the growth of the Ecuadorian insurance industry (see Chart 3.2.4-c).

**Balance sheet and equity**

Turning to the Ecuadorian insurance sector’s aggregate balance sheet, total assets came to 2.16 billion dollars in 2018, while equity stood at 617 million dollars, up 2.8% on the level reported the previous year (See Chart 3.2.4-d). Aggregate capitalization levels in the Ecuadorian insurance sector (measured on total assets) are notably high, exceeding 30% between 2007 and 2011. Thereafter they slipped below this percentage, falling to 25.6% in 2013, recovering partially thereafter to 28.2% by 2015 and falling back to 26.6% of assets by the end of 2016. In 2018 they continued to recover their level of capitalization, reaching 28.6%.

**Investments**

Developments in the aggregate investment portfolio at sector level in Ecuador between 2008 and 2018 can be seen in Chart 3.2.4-e,

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**Table 3.2.4**

Ecuador: premium volume\(^1\) by line of business, 2018

<table>
<thead>
<tr>
<th>Line</th>
<th>Millions of USD</th>
<th>Increase Nominal (%)</th>
<th>Increase Real (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,689</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>Life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual life</td>
<td>413</td>
<td>11.6</td>
<td>11.8</td>
</tr>
<tr>
<td>Group Life</td>
<td>382</td>
<td>12.4</td>
<td>12.6</td>
</tr>
<tr>
<td>Non-Life</td>
<td>1,276</td>
<td>1.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Automobiles</td>
<td>400</td>
<td>5.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Other lines</td>
<td>188</td>
<td>-19.2</td>
<td>-19.0</td>
</tr>
<tr>
<td>Fire, theft and allied lines</td>
<td>238</td>
<td>20.4</td>
<td>20.7</td>
</tr>
<tr>
<td>Transport</td>
<td>107</td>
<td>-13.2</td>
<td>-13.0</td>
</tr>
<tr>
<td>Personal Accident</td>
<td>99</td>
<td>6.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Surety and credit</td>
<td>90</td>
<td>-4.6</td>
<td>-4.4</td>
</tr>
<tr>
<td>Health</td>
<td>80</td>
<td>5.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>75</td>
<td>13.0</td>
<td>13.2</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Superintendency of Companies, Securities and Insurance)

\(^1\) Net premium issued (corresponds to direct and taken premium, less liquidations and rescues, and coinsurance premiums ceded)
while changes in the relative composition of the portfolio are presented in Charts 3.2.4-f and 3.2.4-g.

As can be seen, investment totaled 1.04 billion dollars in 2018 (down 16.2 million dollars on 2017), with an increase in investment in fixed income securities (55.9% in 2018, versus 54.5% in 2017) and real estate (14% in 2018, versus 11.3% in 2017). This was to the detriment of equity instruments (24.5% of total investment, versus 26.5% in 2017).

Technical provisions

The performance and composition of technical provisions in the Ecuadorian insurance industry between 2008 and 2018 can be seen in Charts 3.2.4-h, 3.2.4-i and 3.2.4-j. Technical provisions reached 840 million dollars in 2018, up from 831 million in 2017. Significant growth was seen in provisions for Life insurance, which reached 14.8% by the end of the year. Of the remaining premiums, 24.6% related to provisions for unearned premiums and unexpired risks in Non-Life insurance, 58.5% to provision for outstanding losses, 0.9% to provision for catastrophic risks and the final 1.2% to other technical provisions.

As mentioned in previous reports, it is important to note that the significant change in the composition of technical provisions in 2012 was mainly due to the accounting effect, as Resolution No. SBS-2012-0068 of February 7, 2012, modified the treatment of provisions for outstanding losses, which until 2011 were considered net of the gross amount, while...
including under assets the amount receivable on the part relating to the reinsurer. The other major change was between 2015 and 2016, due to a relative increase in the provision for outstanding losses as a result of the earthquake that struck the country in April 2016.

**Technical performance**

The technical performance of the Ecuadorian insurance industry between 2008 and 2018 is shown in Chart 3.2.4-k. As can be seen, in 2018 the combined ratio increased by 1.1 percentage points to reach 75.9%. This is due to an increase in the loss ratio of 1.5 percentage points and an increase in the expense ratio of 0.38 percentage points. However, it is important to note that the combined total ratio has been well below the parameter of 100% throughout the decade under analysis.

The Non-Life combined ratio (see Chart 3.2.4-l) also increased slightly to 80.2%, up 2.6 percentage points on 2017. The deterioration is explained by the increase in both the loss ratio of 2.2 percentage points and the expense ratio of 0.4 percentage points. However, as indicated above for the total combined ratio of the Ecuadorian market, the indicator for the Non-Life segment has remained at around 80% over the past decade. As noted in previous reports, the technical results indicated above do not include other revenues and non-operational expenses related, on one hand, to other lines of
business carried out by insurance companies in Ecuador, and on the other to certain administration costs that are not counted as such in this country when calculating the expense ratio. This could explain the remarkably low combined ratio, both the total level and the level in the Non-Life insurance segment.

Results and profitability

The Ecuadorian insurance industry posted a positive aggregate technical result of 265 million dollars in 2018, up 4.3% on the previous year. The financial result decreased by 12.7% in comparison to 2017, falling to 38.6 million dollars. As a result, the net result of the insurance industry declined by 27.3% to reach 51 million dollars (see Chart 3.2.4-m).

In terms of the profitability of the Ecuadorian insurance industry, return on equity (ROE) in 2018 fell by 3.4 percentage points to 8.3%, while
return on assets (ROA) came to 2.4%, down 0.8 percentage points on 2017.

Insurance penetration, density and depth

Chart 3.2.4-n shows the key structural changes shaping the development of the Ecuadorian
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Firstly, the penetration index (premiums/GDP) in 2018 stood at 1.6% (0.4% in Life and 1.2% in Non-Life), almost exactly the same as in 2017. The Life market is significantly below the average for Latin America, in terms of both the current level and the trend. It should be noted that penetration in the Non-Life business is closer to the average for Latin America, although it did change direction in 2014 and has been decreasing ever since, moving away from the average for insurance markets in the region.

The density indicator (premiums per capita) stood at 98.9 dollars in 2018, up 1.7% on the level reached in 2017 (97.2 dollars). Density in Ecuador grew steadily until 2014, but has been declining in recent years due to a reduction in premiums resulting from the general economic situation within the country. In 2018, it showed signs of recovery.

Finally, in terms of the depth of the Ecuadorian market (measured as Life insurance premiums to total premiums), the indicator has been rising slowly over the last ten years and more rapidly since 2014, although it still falls far below the absolute average values for the wider region. In 2018, the index was at 24.4%, up 1.8 percentage points on 2017. The depth of the Ecuadorian insurance market has increased by 8.5 percentage points since 2008.

**Estimation of the Insurance Protection Gap**

Chart 3.2.4-o provides an estimate of the insurance gap for the Ecuadorian insurance market between 2008 and 2018. As shown, the IPG in 2018 amounted to 6.58 billion dollars, 3.9 times the size of the actual insurance market in Ecuador at the end of that year. The structure and performance of the IPG between 2008 and 2018 are mainly a product of the Life insurance segment, as is the case in most Latin American markets. At the close of 2018, 63.7% of the IPG was related to Life insurance (4.19 billion dollars), down 4.6 percentage points on the level recorded in 2008. The remaining 36.3% of the insurance gap was related to the Non-Life insurance market (2.39 billion dollars). The potential insurance market in Ecuador at the end of 2018 (measured as the sum of the actual market plus the IPG) was thus estimated at 8.23
billion dollars, 4.9 times the size of the total insurance market in Ecuador that year.

Meanwhile, Charts 3.2.4-p and 3.2.4-q provide an estimation of the IPG as a multiple of the real insurance market in Ecuador between 2008 and 2018. As can be seen, the gap for the Life insurance segment shows a downward trend sustained throughout the period under analysis (falling from 20 to 10.2 times), while for the Non-Life segment there was a downward trend until 2013 when it began to rise again, reaching 1.9 in 2018.

Finally, Chart 3.2.4-r summarizes the capacity of the Ecuadorian insurance market to close the insurance gap, based on a comparative analysis between the growth rates observed over the last ten years and the growth rates that would be required in order to close the IPG set for 2018 over the next decade. The Ecuadorian insurance market grew at an average annual rate of 6.7%; the Life insurance market growing at an average rate of 11.4% and the Non-Life segment at an average rate of 5.6%.

Were the same growth rate observed over the last ten years to continue over the next ten years, the growth rate of the Ecuadorian insurance market would be 10.5 percentage points short of closing the IPG over that period. In the Life segment, the growth would be 15.9 percentage points short of closing the gap, while the Non-Life segment would be 5.6 percentage points short. It should be noted that the shortfall in Non-Life insurance has grown in relation to the previous year.

**Market Development Index (MDI)**

Chart 3.2.4-s provides an estimation of the Market Development Index (MDI) for the insurance industry in Ecuador. Overall, this indicator shows a trend consistent with the average performance across all Latin American insurance markets between 2005 and 2018.

**Comparative analysis of structural ratios**

Chart 3.2.4-t outlines the state of the Ecuadorian market in 2018 when compared with the average for Latin America, measured in terms of the four structural ratios analyzed...
Chart 3.2.4-n

**Ecuador: changes in penetration, density and depth, 2008-2018**

(premiums / GDP, %; premium per capita, USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Superintendency of Companies, Securities and Insurance)
in this report. As can be seen, the Ecuadorian market remains below the average for the wider region in all dimensions except for the Market Development Index, which is close to the regional average.

Insurance market rankings

Overall ranking

There were 30 insurance companies operating in Ecuador in 2018. The top five insurers (CR5) that year accounted for 48.8% of total premiums, revealing slightly lower levels of concentration than in 2017. This was primarily due to the Non-Life insurance segment, as concentration in the Life segment rose over the last year (see Chart 3.2.4-u).
The Ecuadorian market has largely seen an upward trend in concentration levels over the last decade, especially since 2011. This can be seen in Chart 3.2.4-u, which shows changes in the performance of the Herfindahl and CR5 indexes. However, the Herfindahl index is still below the moderate concentration threshold.

In 2018, the overall ranking of insurance groups in the Ecuadorian market (see Chart 3.2.4-v) was led by Sucre, down 1 percentage point on the year below to reach 15.8%. It was followed by Equinoccial (9.3%) and Chubb (9.1%). Pichincha remained in fourth position (8.1%), while Zurich moved up to fifth place with 6.5% following its purchase of QBE Colonial. AIG (6.4%) and Equivida (5.9%) again took sixth and seventh position, while MAPFRE (3.8%) rose one place and Aseguradora del Sur joined the ranking at ninth, pushing Ecuatoriano Suiza into tenth position.

### Life and Non-Life rankings

The 2018 Non-Life ranking was still led by Sucre with a share of 16.1%, 1.6 percentage points less than in 2017. Equinoccial (12%) and Chubb (9.4%) held the same positions as in 2017, and were followed by Zurich (8.6%) and AIG (6.5%). MAPFRE (4.6%), seventh in 2017, moved up to sixth position after overtaking Aseguradora del Sur (4.1%). Finally, the Life ranking in 2018 continued to be led by Pichincha with a share of 28.9%, although it lost market share to Equivida, which accounted for 21.6% of total Life premiums, and to Sucre, which reached 14.8% (see Chart 3.2.4-w).
Key regulatory aspects

The key regulatory aspects relating to the Ecuadorian insurance industry are listed below. With regard to resolutions introduced by the Superintendency of Companies, Securities and Insurance, we would highlight the following:

- **Resolution SCVS-INS-2018-00006**: reforming the regulation on actuarial services for insurance and reinsurance companies and pre-paid health care services classifying, renewing and registering the natural persons or legal entities who receive them, and the role of actuarial professionals.

- Resolution SCVS-INS-2018-007: introducing regulations defining mandatory and prohibited clauses in insurance contracts.

- **Resolution SCVS-INS-2018-0009**: establishing regulations for registering reinsurers and reinsurance intermediaries not established in the country.

- **Resolution SCVS-INS-2018-0024**: introducing regulations on the activities of insurance advisory services, reinsurance intermediaries and insurance appraisers.

- Resolution SCVS-INS-2018-0025: updating regulations on the conduct of claims and appeals on matters relating to insurance.

The following regulations are also of note, which relate to the Board of Monetary and Financial Policy and Regulation:

![Chart 3.2.4-s](Chart 3.2.4-s.png)

**Ecuador: Market Development Index (MDI), 2005-2018 (index 2005=100; annual change)**

![Chart 3.2.4-t](Chart 3.2.4-t.png)

**Ecuador: comparative structural coefficient index* vs. Latin America average, 2018**
• Resolution No. 460-2018-2: modifying the transitional provision for sufficient capital for companies that finance comprehensive pre-paid health care services.

• Resolution No. 482-2018-2: determining maximum equity for private insurance funds.

Source: MAPFRE Economic Research (with data from the Superintendency of Companies, Securities and Insurance)
Resolution No. 483-2018-2: establishing the basic contribution to the value of direct insurance net premiums and to the risk-adjusted variable contribution for private insurance companies, corresponding to the fiscal year 2018, which is determined by risk ratings.

Resolution 490-2018-2: increasing the percentage of service reserves in progress from 0.15% per month to 10%, as from January 2019.

3.2.5 Peru

Macroeconomic environment

The Peruvian economy grew 4% in real terms in 2018, compared with 2.5% the previous year. This acceleration in growth was due to the recovery of domestic demand, following a slowdown in 2017 due largely to the climatological phenomenon known as El Niño, which caused one of the worst natural disasters to have struck Peru in decades (see Chart 3.2.5-a). The restructuring plan and fiscal stimulus introduced by the government, along with the moderately expansive monetary policy rolled out by the Central Bank, have aided this recovery. The fiscal deficit stood at 3.5% of GDP (up from 3.2% in 2017), and public debt at 26.8% of GDP (compared with 25.4% in 2017). The recovery of activity came from widespread improvement across all sectors. It was led by the fishing and manufacturing sector, but there were also improvements in the performance of the other services and agriculture sectors in comparison to the previous year.

The current account deficit increased by 0.3 percentage points in 2018 to reach 1.5% of GDP.

ECLAC predicts growth of 3.2% for the Peruvian economy in 2019, supported by strong private consumption and investment in mining. The path to fiscal consolidation is expected to continue, and public investment is predicted to suffer due to changes in sub-national governments. The external sector will again contribute to growth as mining production recovers, expansions advance and new projects...
progressively enter into production. The IMF, meanwhile, estimates real GDP growth of 3.9% in Peru for 2019.

Insurance market

Growth

As shown in Chart 3.2.5-b and Table 3.2.5-a, following the slight increase of a nominal 0.6% registered in 2017, the insurance market ended 2018 with a strong growth of 13.6% to reach 12.87 billion soles (3.92 billion dollars). The main factor behind this recovery in growth was individual Life insurance, with nominal growth in 2017 of 49.8% bringing the Life segment to 5.68 billion soles (up 18.1%). This was supported by group Life insurance (a 12% increase) and, to a lesser extent, pension insurance (up 0.7%). Meanwhile, Non-Life insurance lines recorded a growth in premiums of 10.3%, reaching 7.19 billion soles (2.19 billion dollars). Nominal growth was registered in all lines of business except Burial (down 1.1%), with Credit and/or surety (up 24%), Health (up 13.9%), Transport (up 13.7%) and Fire (up 12.9%) standing out.

The nominal growth of 13.6% registered by the Peruvian insurance market in 2018 was therefore a product of all the main segments it consists of. 7.7 percentage points of growth related to the Life insurance segment, while the remaining 5.9 percentage points related to the Non-Life segment (see Chart 3.2.5-c).

Balance sheet and equity

The performance of the aggregate balance sheet at sector level for the Peruvian insurance industry throughout the period from 2008 to 2018 can be seen in Chart 3.2.5-d. Total insurance industry assets came to 48.87 billion soles (14.51 billion dollars) in 2018, while equity rose to 7.2 billion soles (2.14 billion dollars), up 1.7 percentage points on the previous year.

It should be noted that aggregate capitalization levels in the Peruvian insurance industry (measured on total assets) improved between 2006 and 2010, climbing steadily from 18.6% in 2006 to 21.7% by the end of 2010. Capitalization then entered a downward trend, falling to 15.1% by the end of 2015, only to rise again in 2016 before dipping slightly in 2017 and 2018 to represent 14.7% of total assets.
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Chart 3.2.5-b
Peru: growth developments in the insurance market, 2008-2018
(premiums, million soles; annual nominal growth rates, %)

Table 3.2.5-a
Peru: volume of premiums\(^1\) by line of business, 2018

<table>
<thead>
<tr>
<th>Line</th>
<th>Millions of soles</th>
<th>Millions of USD</th>
<th>Increase</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nominal</td>
<td>Real</td>
</tr>
<tr>
<td>Total</td>
<td>12,869</td>
<td>3,915</td>
<td>13.6</td>
<td>12.1</td>
</tr>
<tr>
<td>Life</td>
<td>5,682</td>
<td>1,729</td>
<td>18.1</td>
<td>16.6</td>
</tr>
<tr>
<td>Individual Life</td>
<td>2,039</td>
<td>620</td>
<td>49.8</td>
<td>47.8</td>
</tr>
<tr>
<td>Group Life</td>
<td>1,677</td>
<td>510</td>
<td>12.0</td>
<td>10.6</td>
</tr>
<tr>
<td>Pensions</td>
<td>1,967</td>
<td>598</td>
<td>0.7</td>
<td>-0.6</td>
</tr>
<tr>
<td>Non-Life</td>
<td>7,186</td>
<td>2,186</td>
<td>10.3</td>
<td>8.8</td>
</tr>
<tr>
<td>Automobiles</td>
<td>1,381</td>
<td>420</td>
<td>0.4</td>
<td>-0.9</td>
</tr>
<tr>
<td>Fire and allied lines</td>
<td>1,449</td>
<td>441</td>
<td>12.9</td>
<td>11.5</td>
</tr>
<tr>
<td>Other lines</td>
<td>845</td>
<td>257</td>
<td>14.1</td>
<td>12.6</td>
</tr>
<tr>
<td>Health</td>
<td>1,081</td>
<td>329</td>
<td>13.9</td>
<td>12.4</td>
</tr>
<tr>
<td>Personal Accident</td>
<td>751</td>
<td>228</td>
<td>10.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Transport</td>
<td>200</td>
<td>61</td>
<td>13.7</td>
<td>12.2</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>229</td>
<td>70</td>
<td>11.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Burial</td>
<td>143</td>
<td>44</td>
<td>-1.1</td>
<td>-2.4</td>
</tr>
<tr>
<td>Aviation</td>
<td>93</td>
<td>28</td>
<td>4.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Multirisk</td>
<td>186</td>
<td>57</td>
<td>23.1</td>
<td>21.5</td>
</tr>
<tr>
<td>Sea - Hull</td>
<td>81</td>
<td>25</td>
<td>5.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Credit and/or surety</td>
<td>301</td>
<td>92</td>
<td>24.0</td>
<td>22.4</td>
</tr>
<tr>
<td>Workplace accidents</td>
<td>447</td>
<td>136</td>
<td>11.6</td>
<td>10.1</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Banking, Insurance and AFP Superintendency)

\(^1\) Net insurance premiums
Investments

Changes in investment and composition of the aggregate investment portfolio at sector level for the Peruvian insurance industry can be seen in Charts 3.2.5-e, 3.2.5-f and 3.2.5-g. Investment totaled 37 billion soles (10.97 billion dollars) in 2018, most of it concentrated in equities and fixed income financial securities. The composition of the investment portfolio was as follows: 88.4% concentrated in debt and equities, 4.4% in cash and the remaining 7.2% in real estate investments, which were up 0.2 percentage points on the previous year.

Technical provisions

Charts 3.2.5-h, 3.2.5-i and 3.2.5-j show the performance and relative composition of technical provisions. In 2018, technical provisions amounted to 36.3 billion soles (10.78 billion dollars). Of the total provisions, 75.4% related to Life insurance, 16.8% to provision for outstanding losses and the remaining 7.4% to provisions for unearned premiums and unexpired risks in Non-Life insurance.

As reported in previous reports, the volume of technical provisions significantly increased in absolute values in recent years, in both the Life and Non-Life insurance segments. The composition of aggregate provisions remained relatively stable until 2013, when the proportion of Life insurance fell slightly, from around 80% to values closer to 76%. At the end of 2018, they accounted for 75.4% of total provisions.

Technical performance

The technical performance of the Peruvian insurance industry between 2008 and 2018 can be seen in Chart 3.2.5-k. The loss ratio fell by...
almost 1.9 percentage points, reaching 58.9%. The expense ratio also performed positively, falling 2.5 percentage points to reach 57.3% in 2018. The total combined ratio of the Peruvian insurance industry thus fell by 4.4 percentage points in 2018 to reach 116.3%.

Results and profitability

The net result for 2018 was 1.05 billion soles (320 million dollars), up 25.2% on the previous year. Both the relative improvement in technical performance and the increase in financial performance (up 6.3%) contributed to this good result. However, the technical result continued to make a negative contribution in line with the results of the last decade.

Turning our attention to the profitability of the Peruvian insurance industry, return on equity (ROE) stood at 14.6% in 2018, up 2.7 percentage points on the previous year. Meanwhile, return on assets (ROA) reached 2.15% in 2018, 0.3 percentage points above the value reported in 2017 (see Chart 3.2.5-I).
Insurance penetration, density and depth

Chart 3.2.5-m shows the main structural trends shaping the development of the Peruvian insurance industry between 2008 and 2018. The penetration index (premiums/GDP) stood at 1.7% in 2018, up 0.5 percentage points on the level reported in 2008 and 0.1 percentage points above 2017, reversing the downward trend that began in 2016. From a medium-term standpoint, the market penetration index has grown steadily during the period under analysis, but it is still below the average absolute values of the other markets in the region.

Meanwhile, insurance density in Peru (premiums per capita) stood at 402.3 soles (122.4 dollars), 11.7% above the level reported in 2017 (360.2 soles). As noted in our 2017 report, the density of the Peruvian market (measured in local currency) steadily increased up to 2015, then dipped over the next two years before continuing to grow, reaching aggregate growth of 165.3% between 2008 and 2018.

![Chart 3.2.5-h Peru: technical provisions of the insurance market, 2008-2018 (million soles)](chart_url)

Source: MAPFRE Economic Research (with data from the Banking, Insurance and AFP Superintendency)

![Chart 3.2.5-i Peru: structure of technical provisions, 2008-2018 (%)](chart_url)

Source: MAPFRE Economic Research (with data from the Banking, Insurance and AFP Superintendency)

![Chart 3.2.5-j Peru: structure of technical provisions, 2018 (%)](chart_url)

Source: MAPFRE Economic Research (with data from the Banking, Insurance and AFP Superintendency)
Finally, depth of insurance (life insurance premiums to total premiums) came to 44.2%, up 6.3 percentage points on the level registered in 2008 and 1.7 percentage points higher than the previous year. Overall, depth growth in the Peruvian insurance market has remained close to the average values of the Latin American markets over the past decade.

Estimation of the Insurance Protection Gap

Chart 3.2.5-n provides an estimate of the IPG for the Peruvian insurance market between 2008 and 2018. The insurance gap stood at 44.05 billion soles in 2018, 3.4 times the size of the actual insurance market in Peru at the end of that year.

The structure and performance of the IPG over the period under analysis have been mainly...
shaped by the Life insurance segment. At the close of 2018, 59.1% of the insurance gap was a product of Life insurance (26.02 billion soles), down 3.7 percentage points on the share of this segment recorded in 2008. The remaining 40.9% of the IPG for 2018 is a result of the Non-Life insurance segment (18.03 billion soles). Accordingly, the potential insurance market in Peru at the end of 2018 (the sum of the actual market plus the IPG) was estimated at 56.92 billion soles, 4.4 times the size of the total Peruvian insurance market that year.

Chart 3.2.5-o provides an estimation of the insurance gap as a multiple of the actual insurance market in Peru. The IPG fell steadily between 2008 and 2018, changing direction briefly in 2016 and 2017 before correcting itself again in 2018. In the case of the Life insurance segment, the IPG as a multiple of the market fell from 9.4 to 4.6 over the past decade, while in the Non-Life insurance segment, it fell from 3.4 to 2.5 times.

Chart 3.2.5-p summarizes the change in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Peruvian insurance market over the last ten years, comparing the situation in 2018 with the state of the market in 2008. As can be seen, the situation has improved in both the Non-Life segment and, to a greater extent, the Life segment.

Chart 3.2.5-q outlines the capacity of the Peruvian insurance market to close the IPG set for 2018, based on a comparative analysis between the growth rates observed over the last ten years and the growth rates that would be required in order to close the IPG in the next decade.

The Peruvian insurance market registered average annual growth of 11.5% between 2008 and 2018, which consisted of an annual growth rate of 13.2% in the Life insurance segment and of 10.3% for Non-Life insurance. Were the same growth rate observed over the past decade to continue over the next ten years, the growth rate of the Peruvian insurance market would be 5.5 percentage points short of closing the insurance gap estimated for 2018 in the Life segment and 3 percentage points short in the Non-Life segment. It should be noted, however, that this insufficiency has improved in the Life segment in comparison with the previous year, although not in the Non-Life segment, in which insufficiency has increased.

Market Development Index (MDI)

Chart 3.2.5-r provides an estimation of the Market Development Index (MDI) for the insurance sector in Peru, an indicator used in this report to analyze the general trend observed in the performance and maturity of insurance markets. The MDI generally followed an upward trend between 2008 and 2018, albeit with downturns in 2011, 2016 and 2017. In 2018,
Chart 3.2.5-m
Peru: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, soles and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Banking, Insurance and AFP Superintendency)
the indicator began to grow again, approaching the average levels recorded across Latin American insurance markets.

Comparative analysis of structural ratios

The state of the Peruvian insurance market when compared with the average for Latin America, measured in terms of the structural ratios featured in this report, can be seen in Chart 3.2.5-s. As can be seen, all dimensions of the Peruvian market remain below average levels for the wider region, with the notable exception of depth, which is in line with the regional average.

Insurance market rankings

Overall ranking

There were 20 insurance companies operating in Peru in 2018, one less than the previous year. Of these, six focus exclusively on general P&C, three on Life insurance and the rest on both businesses. Market concentration is high, and while it had been falling steadily in recent years, in 2017 this trend was reversed and in 2018 the level remained almost exactly the same as the year before. The Herfindahl index, which in 2010 had crossed over the theoretical threshold that predicts high concentration into the band associated with moderate concentration, recorded high concentration levels again in 2017 and 2018. This situation is confirmed by analyzing the CR5 index, which has replicated this behavior in both the Non-Life and Life segments, further demonstrating the increase in market concentration levels that has
occurred first and foremost in the Life business (see Chart 3.2.5-t).

The 2018 overall ranking of groups in the Peruvian insurance market was largely unchanged from 2017. Rimac and Pacífico continued to hold the top two positions, with market shares of 30.4% and 26.4% respectively. They were followed by MAPFRE, with a market share of 13.4%. Further down the table, the increase in Interseguro’s share after its purchase of Seguros Sura is significant (reaching 7.3%), as are Protecta’s climb to sixth place, overtaking Chubb and Cardif, which have changed places compared with last year, and the return of Ohio National Vida to the ranking, taking tenth place (see Chart 3.2.5-u).
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Life and Non-Life rankings

In the overall Non-Life group ranking for 2018, Rimac, Pacífico, MAPFRE and La Positiva occupied the first four positions, with market shares of 34.3%, 24%, 19% and 14.5% respectively (see Chart 3.2.5-v). As regards the Life ranking for 2018, Pacífico remained in first position with a market share of 29.5%, followed by Rimac (25.5%), Interseguro (14.8%), La Positiva (8.5%) and MAPFRE (6.4%).

Key regulatory aspects

Finally, Table 3.2.5-b shows the main legislative and regulatory adjustments to have arisen within the Peruvian insurance sector in 2018.
Chart 3.2.5-u
Peru: overall ranking, 2017-2018
(market shares, %)

Source: MAPFRE Economic Research (with data from the Banking, Insurance and AFP Superintendency)

Chart 3.2.5-v
Peru: Life and Non-Life ranking, 2017-2018
(market shares, %)

Source: MAPFRE Economic Research (with data from the Banking, Insurance and AFP Superintendency)
### Table 3.2.5-b

Peru: recent regulatory developments in insurance matters

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Main aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law No. 30741 (Law regulating reverse mortgage)</td>
<td>This law established the regulatory framework for the use of reverse mortgages to enable people to supplement their economic income by accessing a secured mortgage loan, which is paid only upon the death of the holder or holders of the loan, unless beneficiaries are designated, in which case they are payable upon the death of the latter.</td>
</tr>
<tr>
<td>Supreme Decree No. 202-2018-EF (Regulation of the Law Regulating Reverse Mortgage)</td>
<td>It regulates aspects related to the beneficiaries of the agreement, appraisal and liens on the property, prepayment of the loan, annuity contracts, early surrender of the contract, judicial and extra judicial execution, among others.</td>
</tr>
<tr>
<td>Resolution SBS No. 886-2018 (Approves the compulsory use of mortality tables for calculating mathematical reserves of pensions in the family life income and deferred life income modalities, as well as gradual and mandatory application for the annual calculation of the withdrawal modality programmed in the PPS and others).</td>
<td>In fulfillment of its mission to protect the pensioner, the Superintendency developed mortality tables with information from the Private Pension System (PPSI), which constitutes an important advance in the regulation of Peru. In the case of annuities under the PPS, insurance companies are required to keep the resources necessary to ensure payment upon retirement, survival or disability pension until the last day of the person’s life. The updating of mortality tables makes it possible to estimate these resources as accurately as possible, and is consistent with international best practices.</td>
</tr>
<tr>
<td>SBS Resolution No. 887-2018 (Approves the Regulations for the Constitution of Annuity Mathematical Reserves and the Analysis of Sufficiency of Assets).</td>
<td>The “Regulation for the Establishment of Mathematical Reserves of Annuities and the Analysis of the Sufficiency of Assets” replaces, as on January 1, 2019, the “Regulations for the Constitution of Mathematical Reserves on the basis of the difference between Assets and Liabilities” (Resolution No. 0562-2002 and Amending). The new regulation amends the methodology for calculating the mathematical reserves annuities associated with the Private Pension System (PPS), and includes within its scope the new methodology for income from Supplemental Risk Working Insurance (SRWI), in order to more accurately recognize future obligations for the payment of these incomes, similar in nature to the PPR income.</td>
</tr>
<tr>
<td>Resolution SBS No. 2608-2018 (Amendment of the Regulations on Classifying and Valuing Insurance Company Investments, Res. SBS No. 7034-2012 and amending)</td>
<td>The Resolution amends the “Regulations for Classifying and Valuing Insurance Company Investments”, updating the methodology for determining the impairment of the value of instruments available for sale and instruments held until maturity. The methodology contains more conservative criteria and distinguishes the criteria applicable to debt instruments and capital instruments. Also, specifics are established for the treatment of the difference in exchange of debt instruments classified as investments held for sale. Finally, the requirements applicable to the authorization procedure are amended so that an insurance company can apply an internal value impairment methodology.</td>
</tr>
<tr>
<td>Circular S-667-2018 (Death indemnifications not claimed by beneficiaries of traffic accident victims covered by Compulsory Transit Accident Insurance (CTAI)).</td>
<td>Insurance companies are required to notify beneficiaries of unclaimed death benefits as a result of a traffic accident involving a vehicle covered by CTAI. The regulations indicate the methods and deadlines for carrying out this communication.</td>
</tr>
<tr>
<td>Resolution SBS No. 2972-2018 (Amending the Investment Regulations of Insurance Companies and incorporating Procedure No. 177 into the SBS Tupa)</td>
<td>The Investment Regulation is amended to specify that the authorization procedure for considering an investment as eligible is applicable at the individual level for a specific instrument, asset or financial operation, as well as for a group or type of instrument, asset or financial operation. Further details related to supporting documentation for notification and authorization processes are included. Furthermore, they are incorporated as eligible assets under the notification process for dual currency fixed coupon instruments, as well as structured instruments with protected capital, provided certain requirements are met. In order to strengthen insurance companies’ real estate risk management, the Risk Unit must monitor the management and valuation of properties, propose guidelines for selecting counterparts in lease contracts, etc. Finally, specifications are set for the application of investment limits by issuer and economic group.</td>
</tr>
</tbody>
</table>
3.2.6 Bolivia

Macroeconomic environment

In 2018, the Bolivian economy grew 4.3% in real terms, slightly higher than the previous year’s growth of 4.2%. It remains one of the most buoyant economies in the region (see Chart 3.2.6-a). Domestic demand is the main growth driver, as the result of a fiscal policy that has boosted public investment and of relaxed monetary policy during a time of falling inflation, the average value of which in 2018 was 2.3%, compared with 2.8% the previous year. These policies have also contributed to low unemployment rates, high private consumption and gross fixed capital formation. Turning to the external sector, however, despite the increase in price of the main export products, particularly natural gas, high deficits persist for both the public sector balance sheet and the current account. At the end of 2018, they reached levels of around 8.3% (up from 7.4% in 2017) and 4.9% (down from 6.3% in 2017) of GDP respectively.

In terms of growth projections, ECLAC estimates that by 2019 the momentum of public investment in both infrastructure and energy and in the health and education sectors would be maintained. This combined with sustained consumption growth would allow the Bolivian economy to continue to show a similar rate of expansion as in 2018 (4%). The IMF also estimates a growth rate of 4% for Bolivia in 2019.

Insurance market

Growth

Premium volume in the Bolivian insurance market amounted to 3.7 billion bolivianos (535 million dollars) in 2018, which represented a nominal growth of 10.7% and a real increase of 8.2% compared with the previous year. This was mainly related to the Life insurance segment, although both segments performed positively. This was a clear upturn in comparison with growth rates in the sector the previous year. Of the total premiums, 66% related to Non-Life insurance in 2018, with the remaining 34% relating to Life insurance (see Table 3.2.6-a and Chart 3.2.6-b).
Life insurance continued its steady growth of more than a decade, accounting for 34% of premiums (up from 20% in 2008). Life insurance premiums gained a nominal increase of 22.1% and a real increase of 19.3% to reach 1.25 billion bolivianos (180 million dollars). The main driver of this growth was individual Life insurance (an increase of 23.1%), more specifically mortgage protection insurance (up 26.3%), which accounts for 68% of the premiums in this segment.

Meanwhile, Non-Life insurance premiums (which made up 66% of premiums in 2018) grew a nominal 5.7%, or 3.3% in real terms (compared with a nominal 0.3% and a real -2.5% in 2017), to reach 2.45 billion bolivianos (355 million dollars). Automobile was the most important modality, which includes Compulsory
Traffic Accident Insurance (CTAI) and which fell by 2.5% in 2018.

As shown in Chart 3.2.6-c, Life insurance accounted for 6.7 percentage points in the growth registered by the Bolivian insurance market in 2018, while the Non-Life insurance segment accounted for 4 percentage points.

**Balance sheet and equity**

As indicated by the overall balance sheet for the Bolivian insurance market at sector level (see Chart 3.2.6-d), total assets amounted to 7.35 billion bolivianos (1.06 billion dollars) in 2018, while equity totaled 2.14 billion bolivianos (310 million dollars), up 14 percentage points on 2017.

Moreover, the Bolivian insurance industry maintained aggregate capitalization levels (measured on total assets) of over 20% between 2008 and 2018, reaching 29.1% of total assets in 2018.
Investments

Changes in investment in the Bolivian insurance market between 2008 and 2018 are shown in Chart 3.2.6-e. As can be seen, total investment reached 5.43 billion bolivianos (786 million dollars) in 2018.

Charts 3.2.6-f and 3.2.6-g show changes in the structure of the investment portfolio at sector level in the Bolivian insurance market between 2008 and 2017 (the last year for which disaggregated data is available). In 2017, the investment portfolio was concentrated in fixed income (62.5%) and, to a significantly lesser extent, in equity instruments (7.5%), real estate (18%), cash and other investments (9.4% and 2.6% respectively). The structure of the portfolio has changed significantly over the period under analysis, with the weight of investment in equities falling from above 24% in 2012 and 2013 to around 12% in 2014 and 2015 and to 7.5% by 2017. Meanwhile, the weight of real estate assets has increased from 3.4% in 2008 to 18% in 2017.

Technical provisions

The performance and relative composition of technical provisions within the Bolivian insurance industry can be seen in Charts 3.2.6-h, 3.2.6-i and 3.2.6-j. In 2018, technical provisions amounted to 3.3 billion bolivianos (478 million dollars). According to the latest
As stated in our report for 2017, despite the fact that there was a sustained reduction in the weight of the provisions for Life insurance within the Bolivian market between 2009 and 2015, which fell from 88.8% of total provisions in 2009 to 77.7% in 2015, in 2016 there was a slight increase to 78.3% and in 2017 there was another small increase, reaching 78.9%. This also holds true for the absolute values, which fell from 2.8 billion bolivianos [405 million dollars] in 2009 to 2.47 billion bolivianos [358 million dollars] in 2015, before climbing to 2.59 billion bolivianos by 2017 [374 million dollars]. During the same period, the provision for unearned premiums and unexpired risks in Non-Life insurance more than doubled in value, from 173.3 million bolivianos [25 million dollars] in 2009 to 382 million bolivianos [55 million dollars] in 2017.
million dollars) in 2017. The provision for outstanding losses in Non-Life insurance dropped over the last two years, falling to 304.8 million bolivianos (44 million dollars) in 2017.

Technical performance

As regards the technical performance of the Bolivian insurance market, the combined ratio improved by 1.9 percentage points in 2018 to reach 99.4%, due to a decrease in the expense ratio of 2.1 percentage points and a slight increase in the loss ratio of 0.3 percentage points (see Chart 3.2.6-k).

Meanwhile, the combined ratio of the Non-Life insurance companies in 2018 fell by 2.8 percentage points to 92.4%. While there was a downward trend between 2012 and 2016 in the combined ratio, this seems to have changed over the last two years. There has been an increase in the expense ratio over the last three years, while the loss ratio remains stable (see Chart 3.2.6-l).

Results and profitability

The Bolivian insurance industry posted a financial result of 224 million bolivianos (32 million dollars) in 2018, down 15.5% on the previous year (see Chart 3.2.6-m). Despite this lower financial result, the good technical result, together with a positive adjustment in inflation, resulted in a 15.7% increase in the net financial result in the 2018 fiscal year, amounting to 246.5 million bolivianos (36 million dollars).

Turning to profitability, return on equity (ROE) was at 11.5% in 2018, up 0.2 percentage points on 2017. The same holds true for return on assets (ROA), which reached 3.4% in 2018, up 0.3 percentage points on 2017. Broadly speaking, the profitability of the Bolivian insurance business has remained stable over the period under analysis, mainly supported by
the financial result, the contribution of which was more consistent than that of the technical result.

Insurance penetration, density and depth

Chart 3.2.6-n shows the main structural trends shaping the development of the Bolivian insurance industry between 2008 and 2018. The penetration index (premiums/GDP) again came to 1.3% in 2018. As noted in previous versions of this report, the penetration index in the Bolivian market remained stable between 2008 and 2014, before rising and then falling again over the last two years, dropping below and diverging from the average values observed across Latin America over the last decade.

Meanwhile, insurance density (premiums per capita) reached 326 bolivianos (47 dollars) in 2018, following an upward trend observed over
the decade under analysis, with a growth of 125% since 2008, in which density stood at 145 bolivianos.

Finally, with regard to depth (Life insurance premiums to total premiums), the indicator for 2018 came to 33.7%, up 13.9 percentage points on 2008. In this case, depth has increased steadily in the Bolivian insurance market during the period under analysis and although it is still below the average values observed across Latin America, in recent years it has been approaching these values.

**Estimation of the Insurance Protection Gap**

Chart 3.2.6-o provides an estimation of the insurance gap for the Bolivian insurance market between 2008 and 2018. The IPG in 2018 stood at 18.14 billion bolivianos (2.63 billion dollars), nearly five times the size of the actual insurance market in Bolivia at the end of that year.

As is also the case for other insurance markets in Latin America, the structure and performance of the IPG over the last ten years are largely a product of the Life insurance segment. In 2008, 65.9% of the IPG was related to Life insurance, which amounted to 5.33 billion bolivianos. By 2018, this had fallen to 60.2% (10.92 billion bolivianos).

The potential insurance market in Bolivia in 2018 (the sum of the actual market plus the IPG) is estimated at 21.84 billion bolivianos (3.16 billion dollars), almost six times the size of the total Bolivian insurance market that year.

Chart 3.2.6-p provides an estimation of the IPG as a multiple of the actual market in each year of the period under analysis. Measured as a multiple of the actual market, the IPG in the Bolivian insurance market began to decline significantly from 2014, down to 4.9 times in 2018. In the Non-Life segment, the IPG as a multiple of the actual market increased from 2.4 to 2.9 times, while in the Life insurance segment it declined from 19.1 to 8.8 times between 2008 and 2018. In spite of this, the IPG in the Non-Life insurance segment has rebounded as a multiple of the actual market since 2015, rising from 2.4 times in that year to 2.9 in 2018.

Chart 3.2.6-q summarizes the changes in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Bolivian insurance market in 2008 and 2018. As can be seen, only the Life insurance segment shows signs of improvement during this time.

Last but not least, Chart 3.2.6-r outlines the capacity shown by the Bolivian insurance market to close the IPG, based on a comparative analysis between the growth rates.
Chart 3.2.6-n
Bolivia: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, bolivianos and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Pension and Insurance Tax and Control Authority)
observed over the last ten years in the market and the growth rates that would be needed to close the IPG in 2018.

The Bolivian insurance market reported average annual growth of 10.1% between 2008 and 2018, which consisted of an average annual growth of 16.1% in the Life segment and 8.1% in the Non-Life insurance segment. Were the same growth pattern to continue over the next ten years, the Bolivian market as a whole would fall 9.3 percentage points short of the amount needed to breach the IPG calculated for 2018. The same would apply to both the Life insurance segment [short by 9.4 percentage points] and the Non-Life segment [short by 6.7 percentage points]. This means that to close the IPG estimated for 2018, the Bolivian insurance market would require annual growth rates substantially higher than those observed over the last decade: 19.4% for the total market, and 25.6% and 14.7% for the Life and Non-Life segments respectively.

**Market Development Index (MDI)**

Chart 3.2.6-s provides an estimation of the Market Development Index [MDI] for the
Bolivian insurance industry. As discussed previously, the aim of the MDI as an indicator is to summarize trends shaping the performance and maturity of insurance markets. In the case of the Bolivian insurance industry, the indicator shows a positive trend between 2005 and 2018, which becomes more pronounced from 2013 onward and is generally in line with the average trend observed across the Latin American market as a whole.

Comparative analysis of structural ratios

Chart 3.2.6-t outlines the state of the Bolivian insurance market when compared with the average for Latin America, measured in terms of the structural indicators featured in this report. As can be seen, all of these indicators are below the regional average except for the Market Development Index.

Insurance market rankings

Overall ranking

18 insurance companies were operating in the Bolivian insurance market in 2018, nine of which operated exclusively in the People line of business. The remaining nine operated in General P&C and Bonds. In July 2018, the state-owned property insurance and reinsurance company Unibienes, a member of the Union Financial Group, began operating. The State had first entered the insurance market with its company Univida in 2015; this new company has been introduced with the aim of enhancing the field of action for state-owned companies in this sector in order to provide greater access to insurance, especially for low-income families.
Over the last decade, levels of concentration in the Bolivian insurance market have fallen steadily. In 2018, the Herfindahl index fell to 975 points, below the threshold associated with a moderate level of concentration (1000). The top five insurers (in terms of individual companies) accounted for 60.8% of total premiums between them, 2.6 percentage points fewer than in 2017. The concentration trend is higher when measured in group terms, and is also higher in the Life segment than in the Non-Life segment (see Chart 3.2.6-u).

The overall ranking at the end of 2018 was again led by Alianza Seguros, with a market share of 22.5%. This was followed by Nacional Seguros with 20.3% and BISA Seguros with 16.9%. Fourth place went to La Boliviana Ciacruz, with a market share of 15.5% (see Chart 3.2.6-v).

**Life and Non-Life rankings**

In the 2018 Non-Life ranking, Alianza Seguros topped the table with a market share of 22.2%, followed by La Boliviana Ciacruz with 18.2% and BISA Seguros with 17.8% in third place. Turning our attention to the Life ranking, the 2018 table was led by Nacional Seguros with 37.2% of market premiums, followed by Alianza Seguros with 23.1% and BISA with a market share of 15.1% (see Chart 3.2.6-w).

**Key regulatory aspects**

Finally, Table 3.2.6-b shows the main regulatory developments to have arisen within the Bolivian insurance industry in 2018. With regard to 2019, the Bolivian Multinational Legislative Assembly adopted Law No. 1155 on March 12, 2019.
law introduced the Compulsory Insurance for Construction Workplace Accidents. This insurance will be administered and marketed by a state-owned insurer established for the purpose and by authorized insurance companies that sign marketing agreements with the state-owned insurer, mitigating the risk under coinsurance, reinsurance and/or any legal method permitted, assuming full control of the entire process. The Executive State Body will regulate all aspects needed for its implementation. After it comes into effect, all construction workers will receive this insurance every year.
The Latin American Insurance Market in 2018

Source: MAPFRE Economic Research (with data from the Pension and Insurance Tax and Control Authority)

Chart 3.2.6-w
Bolivia: Life and Non-Life ranking, 2017-2018
(market shares, %)

Table 3.2.6-b
Bolivia: recent regulatory developments in insurance matters

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Date</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA 1473</td>
<td>11/01/2018</td>
<td>Modifies Appendix I of the minimum scope for the conduct of external audits of insurance and reinsurance entities approved by administrative resolution SPVS IS No 901 of November 20, 2008 applicable to insurance entities that administer insurance plans.</td>
</tr>
<tr>
<td>RA 1440</td>
<td>10/24/2018</td>
<td>Clarifies regulations for health prepaid entities approved by Administrative Resolution APS/DJ/DS/1363/2018, October 09, 2018</td>
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<td>RA 1363</td>
<td>10/9/2018</td>
<td>Approves regulations for health prepaid entities.</td>
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<tr>
<td>RA 1291</td>
<td>9/24/2018</td>
<td>Approves rules for opening, moving, closing and converting customer service points for insurance market operators.</td>
</tr>
<tr>
<td>RA 1182</td>
<td>9/3/2018</td>
<td>Amends regulations for the absorption of losses by insurance and reinsurance entities approved by Administrative Resolution No 769, September 17, 2002</td>
</tr>
<tr>
<td>RA 1124</td>
<td>8/24/2018</td>
<td>Amends Administrative Resolution APS/DJ/DS/UI/638/2017 of May 31, 2017 that authorizes insurance entities that administer insurance plans to combine with financial intermediation entities for granting syndicated loans.</td>
</tr>
<tr>
<td>RA 1093</td>
<td>8/21/2018</td>
<td>Approves mediation regulations before the supervisory and control authority for pensions and insurance - APS</td>
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<tr>
<td>RA 1071</td>
<td>8/16/2018</td>
<td>Amends Articles 5 and 7 of the operational regulation of the Compulsory Traffic Accident Insurance - CTAI approved by Administrative Resolution IS No 595 of October 05, 2004 and has pre-FISO assignment for marketing CTAI pursuant to current regulations.</td>
</tr>
</tbody>
</table>

Source: Pension and Insurance Control Authority
3.2.7 Chile

Macroeconomic environment

The Chilean economy grew 4% in real terms in 2018, compared with 1.3% in 2017. With this, Chile returns to robust growth, following modest growth over the previous four years (see Chart 3.2.7-a). This was mainly due to booming investment. By productive sector, agriculture, construction, personal and business services and trade stood out in 2018. The mining sector showed an improved performance in the first quarter of the year due to the higher international price of copper, but its subsequent fall caused mining exports to plateau again, especially in the third quarter of the year. In the construction sector, residential building activity recovered.

Tax revenues increased due to strong economic performance, while current public spending on fiscal policy was lowered, reducing the public deficit to 1.7% of GDP (down from 2.8% in 2017). As a result, the growth of public debt to GDP moderated to 25.6% (23.5% in 2017). With regard to the foreign sector, growth in export activity did not offset the sharp increase in imports, which impaired the trade balance. The foreign sector’s current account deficit also increased, reaching 3.1% in 2018 compared with 1.5% in the previous year.

Average inflation increased slightly to 2.3% (2.2% in 2017), below the Central Bank’s target of 3%, while the unemployment rate increased by 0.3 percentage points to 7% (6.7% in 2017).

The climate of currency depreciation led the Central Bank to adopt a slightly contractive monetary policy to contain inflationary pressures, with an increase of 25 basis points in October 2018. In January 2019, there was an increase of another 25 basis points to 3%, but in June this year rates fell to 2.5%.

With regard to growth forecasts for 2019, ECLAC expects a slowdown in economic growth to 2.8%. In terms of expenditure, consumption and investment will maintain a moderate growth rate. Consumption will be affected by the rise in unemployment. Exports will have an impact on the expected decline in the prices of raw materials, while slow growth in external demand is expected. Gross fixed capital formation could lead to a reduced pace of expansion. The IMF, meanwhile, estimates a growth rate of 3.4% in Chile in 2019.

Insurance market

Growth

Following the slight slowdown 2017, the Chilean insurance market grew at its previous steady pace again in 2018, reaching a premium volume of 8.9 trillion pesos (13.85 billion dollars), 7.6% more than the previous year in nominal terms and amounting to a rate of 5.2% after discounting the effect of inflation (see Table 3.2.7-a and Chart 3.2.7-b).

Life insurance performed positively in 2018, with a nominal increase of 6.4% in revenue from premiums and 4% in real terms. In contrast to 2017, Pension insurance, which accounts for 70% of the Life insurance line, performed well in 2018, with an increase of 11.9%, compensating for the fall in individual Life insurance of 15.3%. Non-Life insurance also contributed very positively to the growth of the industry, posting 3.49 trillion pesos in premiums (5.44 billion dollars), up 9.5% on the value reported in 2017. All modalities registered growth, both in nominal and in real terms. There was significant growth in the two main lines, Fire and allied lines and Automobiles, which recorded nominal growth of 10.8% and 11.2% respectively.

As shown in Chart 3.2.7-c, Life insurance contributed 3.9 percentage points to the growth of the Chilean insurance industry in 2018, while Non-Life insurance contributed the remaining 3.7 percentage points, totaling growth of 7.6% in 2018.

Balance sheet and equity

Chart 3.2.7-d summarizes the aggregate balance sheet at sector level for the Chilean insurance industry between 2008 and 2018. As can be seen, total assets in the industry amounted to 47.8 trillion pesos (68.91 billion dollars) at the end of 2018, while equity came to 4.56 trillion pesos (6.58 billion dollars), up 5.4% on the value reported in 2017.

The Chilean insurance industry’s capitalization level grew steadily over the period in absolute...
terms. However, in relative terms, the capitalization ratio (capital to total assets) began falling in 2010, dropping from values of over 12% in that year to 9.6% in 2018.

**Investments**

Charts 3.2.7-e, 3.2.7-f and 3.2.7-g show the performance and composition of the aggregate investment portfolio at sector level for the Chilean insurance industry between 2008 and 2018. As can be seen, investment in the sector totaled 42.97 trillion pesos (61.95 billion dollars) in 2018, concentrated in fixed income.
(58.8%) and, to a significantly lesser extent, in equities (8.3%).

As was mentioned in our 2017 report, it should be noted that over the period under analysis, fixed income products have lost relative weight in total investments, falling from 76% in 2008 to 58.8% in 2018. By contrast, the weight of real estate investment and other types of financial investment (especially bank deposits) grew during the period, climbing in each case from around 10% of the total portfolio in 2008 to 14.4% and 17.7% in 2018 respectively.

Technical provisions

The performance and relative composition of the Chilean insurance industry’s technical provisions between 2008 and 2018 can be seen in Charts 3.2.7-h, 3.2.7-i and 3.2.7-j. As demonstrated, technical provisions in 2018 stood at 40.49 trillion pesos (58.4 billion dollars). Of these total technical provisions, 90.9% related to Life insurance, 4.6% to provisions for unearned premiums and

<table>
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<tr>
<th>Line</th>
<th>Millions of pesos</th>
<th>Millions of USD</th>
<th>Increase Nominal (%)</th>
<th>Increase Real (%)</th>
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<tbody>
<tr>
<td>Total</td>
<td>8,897,609</td>
<td>13,854</td>
<td>7.6</td>
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<td>Life</td>
<td>5,407,209</td>
<td>8,419</td>
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<td>Individual life</td>
<td>725,558</td>
<td>1,130</td>
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<td>Group Life</td>
<td>879,518</td>
<td>1,369</td>
<td>6.3</td>
<td>3.9</td>
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<td>Insurance plans</td>
<td>3,802,134</td>
<td>5,920</td>
<td>11.9</td>
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<td>Non-Life</td>
<td>3,490,400</td>
<td>5,435</td>
<td>9.5</td>
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<td>Fire and allied lines</td>
<td>865,684</td>
<td>1,348</td>
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<td>8.3</td>
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<td>837,201</td>
<td>1,304</td>
<td>11.2</td>
<td>8.7</td>
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<tr>
<td>Other lines</td>
<td>539,137</td>
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<td>Health</td>
<td>569,668</td>
<td>887</td>
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<tr>
<td>Personal Accident2</td>
<td>299,405</td>
<td>446</td>
<td>6.6</td>
<td>4.2</td>
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<td>Transport</td>
<td>118,699</td>
<td>185</td>
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<td>Third-party liability</td>
<td>117,834</td>
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<td>140,771</td>
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<td>9.9</td>
<td>7.4</td>
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</table>

Source: MAPFRE Economic Research (with data from the Chile Insurance Association)

1/ Direct premiums
2/ Includes Compulsory Personal Accident Insurance (CPAI)
unexpired risks in Non-Life insurance, 3.2% to the provision for outstanding losses, 0.03% to the provision for catastrophic risks and the remaining 1.2% to other technical provisions.

It is important to note that over the period under analysis, the relative weight of Non-Life insurance provisions increased from 2.5% in 2008 to 4.6% in 2018, yet still remains low when compared with the significant weight of technical provisions for the Life insurance segment, and annuities linked to the Chilean pension system in particular.

Technical performance

The consolidated technical result for the Chilean insurance sector continued to be negative in 2018, standing at 116.7% despite an improvement in the combined ratio of 6.1 percentage points as a result of a decrease in the loss and expense ratios of 4.6 and 1.5 percentage points respectively.

Turning to the technical performance of the Non-Life segment, Chart 3.2.7-l shows that the combined ratio has improved in comparison to the previous year to reach 98% in 2018, down 4 percentage points. This behavior is largely due to the decrease in the loss ratio of 3.9%, which has caused the combined ratio to be below 100% for the first time since 2013.

Results and profitability

While the sector’s consolidated technical result remained negative in 2018, the Chilean insurance industry posted a positive net result of 511.73 billion pesos (797 million dollars). However, this was down 17.8% on the previous year, due to lower financial results. As shown in Chart 3.2.7-m, the positive net result that the sector has obtained over nearly the entire period under analysis was down to financial results which were able to counter the negative technical results.

Moving to the profitability of the Chilean insurance industry, return on equity (ROE) stood at 11.2% in 2018, down 3.2 percentage points on the previous year. Similarly, return on assets (ROA) decreased by 0.3 percentage points from 2017 to reach 1.1%.
Insurance penetration, density and depth

The main structural trends shaping the development of the Chilean industry over the last decade can be seen in Chart 3.2.7-n. It should be noted that the penetration index (premiums/GDP) in Chile is one of the highest in Latin America, second only to Puerto Rico. The index rose 0.1 percentage points in 2018 to reach 4.7%, 0.8 percentage points higher than in 2008. As can be seen in the same chart, the penetration index for the Chilean market has grown steadily since 2008, in line with the average trend recorded by the Latin American insurance market as a whole and above the absolute average values for the region.

The insurance density index (premiums per capita) in Chile also increased in 2018 to reach 475,067 pesos (740 dollars), 6.1% higher than the value recorded in 2017 (447,653 pesos). As with the penetration indicator, density (measured in local currency) climbed steadily between 2008 and 2018. It should be noted that, as recorded in previous reports, the high
density level in the Chilean market is largely determined by the long-standing contribution of the private insurance industry in the pension system in the form of annuities.

Finally, despite the increase in Life insurance business in 2018, the depth of the Chilean market (Life insurance premiums to total premiums) registered a decrease of 0.7 percentage points, due to higher growth in the Non-Life segment of 60.8%, well above the average in the Latin American insurance market.

Estimation of the Insurance Protection Gap

Chart 3.2.7-o provides an estimation of the IPG for the Chilean insurance market between 2008
and 2018. As shown, the insurance gap in 2018 stood at 5.8 trillion pesos (9.03 billion dollars), 0.7 times the size of the actual insurance market in Chile at the end of the year.

The structure and performance of the IPG over the period under analysis show a relative balance between the contributions from Life and Non-Life insurance. Indeed, 47.9% of the IPG related to Life insurance (2.78 trillion pesos) at the end of 2018, which is 10.5 percentage points below the level observed in 2008. The remaining 52.1% related to the gap in the Non-Life insurance segment (3.02 trillion pesos). Accordingly, the potential insurance market in Chile at the close of 2018 (measured as the sum of the actual market plus the IPG) is estimated at 14.7 trillion pesos (22.89 billion dollars), 1.7 times the size of the total Chilean insurance market that year.

Chart 3.2.7-p provides an estimation of the insurance gap as a multiple of the actual insurance market in Chile. There was a
downward trend in the IPG throughout the period under analysis. During this time, the total insurance gap fell from 1.1 to 0.7 times the size of the actual market. The same is true for the multiple for the Life market, which fell from 1.1 to 0.5 (with a small upturn between 2016 and 2018), and for the Non-Life market, which fell from 1.1 to 0.9.

Chart 3.2.7-q shows the change in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Chilean insurance market over the last ten years, comparing the situation in 2018 with the state of the market in 2008. The situation has improved in the Non-Life segment, and especially in the Life business.

Finally, Chart 3.2.7-r outlines the capacity of the Chilean insurance market to close the insurance gap determined in 2018, based on a comparative analysis of the growth rates observed over the last ten years and the growth rates that would be needed to close the IPG over the next ten years. This shows that the Chilean market grew at an average annual growth rate of 9.4% between 2008 and 2018, while the Life and Non-Life segments grew at a rate of 9.5% and 9.1% respectively. The analysis shows that, were the same growth to continue over the next ten years, the growth rate of the Chilean insurance market would be sufficient to close the insurance gap for both the Life and Non-Life insurance segments.

Market Development Index (MDI)

Chart 3.2.7-s provides an estimation of the Market Development Index (MDI) for the Chilean insurance industry. The MDI, which is used as an indicator of the general trends shaping the development and maturity of insurance markets, performed positively until 2016, with a fall in 2017 and a slight recovery in 2018.

Comparative analysis of structural ratios

Lastly, Chart 3.2.7-t summarizes the state of the Chilean insurance market when compared with the average for Latin America, measured in terms of the structural indicators featured in this report. As can be seen, the indicators for...
Chart 3.2.7-n
Chile: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, pesos and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Commission for the Financial Market and the Chile Insurance Association)
THE LATIN AMERICAN INSURANCE MARKET IN 2018

the Chilean market all remain above the average for Latin America, especially in terms of density and penetration, indicating strong levels of local development in comparison to markets in the wider region.

Insurance market rankings

Overall ranking

At the end of 2018, 31 general insurance companies and 37 Life insurance companies were operating in the Chilean insurance market. Chart 3.2.7-u shows the concentration indicators for the Chilean insurance industry over the decade under analysis. The Herfindahl index reveals a low level of concentration in the industry, falling below the theoretical threshold indicative of moderate concentration. Meanwhile, the CR5 index (market share of the five largest insurance companies) remained stable throughout the period and, as can be seen in the chart, the Non-Life business saw increasingly low levels of concentration, falling

<table>
<thead>
<tr>
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<th>Life IPG</th>
</tr>
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<tbody>
<tr>
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</tr>
<tr>
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<tr>
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Source: MAPFRE Economic Research

<table>
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<th>IPG</th>
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</tr>
<tr>
<td>2018</td>
<td>3,000</td>
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</table>

Source: MAPFRE Economic Research

<table>
<thead>
<tr>
<th>Year</th>
<th>Total market</th>
<th>Life (LHS)</th>
<th>Non-Life (RHS)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
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<tr>
<td>2009</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2010</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2011</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2012</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2013</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2014</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2015</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2016</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2017</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2018</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research
The overall ranking of insurance groups in 2018 featured the same companies as the previous year, but there were some changes in the positions these companies held. MetLife still topped the table with a market share of 10%, closely followed by Zurich, who moved up to second place. The increase in Zurich’s premiums is explained by the strong performance of Disability and Survivors’ Insurance (SIS) and of Annuities, as well as its acquisition of the EuroAmerica Life insurance and group insurance businesses through its subsidiary Chilena Consolidada. Penta Vida rose two positions to third place (9.9%), thanks to the rapid growth of its Annuities business. Consorcio (8.4%) held fourth place, while the Colombian company Sura (6.8%) dropped from second to fifth place after the sale of its Annuities business. BCI, BNP Paribas Cardif and Liberty each rose one position, while Cámara and Security Previsión fell one place and two places respectively (see Chart 3.2.7-v).

Life and Non-Life rankings

The Non-Life ranking featured all the same groups as in 2017. The only change to occur was the position of BCI, which rose to first place with 12.3%, pushing Sura into second place with 11.8% (see Chart 3.2.7-w).

![Chart 3.2.7-q](image)

**Chile: capacity to close the IPG, 2008-2018**

*Source: MAPFRE Economic Research*

![Chart 3.2.7-r](image)

**Chile: the IPG as a multiple of the actual market, 2008 and 2018**

*Source: MAPFRE Economic Research*
The Life ranking also featured the same groups as in 2017, although there were some changes in their relative positions. Penta Vida (16.3%) topped the table after an extraordinary premium increase of 41.7%, due mainly to the increase in sales of Annuities. This caused Metlife (13.1%) and Consorcio (11.6%) to fall one position each. Another significant change was to Sura’s position (3.5%), which fell from seventh to tenth place following the sale of its Annuities business.

Key regulatory aspects

The Financial Market Commission (CMF), which is the body responsible for supervising the Chilean insurance market, is currently migrating toward best international practices when it comes to the regulation of the Chilean insurance industry. A number of new regulations have been issued in recent years in this regard. Progress has also been made in developing and implementing new supervision methods (solvency and market conduct).

In 2018 the CMF carried out a review of its Bill envisioning a model of Risk-Based Supervision (RBS), which has been undergoing a second round of scrutiny before the Finance Committee of the Chilean Senate. At the end of October, proposals for instructions to be added were sent to the Ministry of Finance, taking into account changes in the CMF institutional framework and corporate governance, as well as the legislative technique used in the Law No. 21.130 issued on January 12, 2019, which amended the General Law on Banks. Since international standards are constantly...
developing, the most recent developments in this area were incorporated into the proposal.

Law No. 21.130 also introduced amendments to the CMF by redistributing the duties of the Chairman and Council of the Commission, extending the current powers of the CMF Council in the areas of supervision and regulation and thus strengthening the model of collegiate governance. It also grants the CMF new powers, including express permission to request information for statistical purposes, and facilitates the exchange of information with other public bodies, including those reserved.

At the same time, the CMF is continuing to develop and implement Pillar 1 (regulatory) and...
Pillar 2 (supervisory) of the new RBS model. This is how progress has been made both in developing a Risk-Based Capital (RBC) method and in applying a Risk Matrix. This has resulted in the fulfillment of one of the objectives in the new supervision model: encouraging insurers to develop and strengthen their risk management processes.

It is important to mention the five methodological documents on the subject of Risk-Based Capital (RBC) that the CMF has published to date. Six quantitative impact studies (QIS) have also been carried out and a seventh is in progress, the results of which insurers must report by the end of August 2019. This, in combination with the Risk Matrix audits that have been completed to date by insurers, has allowed the CMF to gain further experience in implementing the model while fine-tuning its methodologies and the scope of its work.

With regard to the main regulations issued in 2018 and in 2019 to date, the following are particularly noteworthy:

- **General Regulation 427, 09/13/2018**: modifying General Regulation 200 by establishing rules on transactions to hedge financial risks, investments in financial derivatives and stock lending operations. The modification made introduced the possibility to regularize, within a maximum period of one year, an excess over the limits that could occur as a result of a merger of two or more counter-parties.

- **General Regulation 428, 01/04/2019**: amending General Regulation 218, improving the System for Pension Consultations and Provisions (SCOMP), aiming to make the analysis and decision process smoother for the enrollee at the time of retirement. The SCOMP is the system through which enrollees who are about to retire obtain comparable information regarding life annuities and programmed retirement. The changes made to the regulations aim to make the Certificates of Pension Provisions issued by the SCOMP and received by the enrollees clearer for the enrollees, allowing them to compare pension provisions, the differences between current pension modalities and the payment of commissions in each case, among other matters.
3.2.8 Paraguay

Macroeconomic environment

The Paraguayan economy posted estimated growth of around 3.7% in real terms in 2018, a value lower than the 5% reported the previous year (see Chart 3.2.8-a). According to ECLAC, the first half of 2018 saw significant momentum due to the growth of the services, manufacturing and construction sectors. Agricultural production also showed positive growth due to a strong season for soybeans, corn, cassava and tobacco. The electricity and water sector, on the other hand, suffered an inter-year fall. There was less momentum in economic activity during the second half of the year due to the complex external situation which affected sales in areas near the border and caused a fall in electricity production.

The Central Bank revised some of its foreign trade statistics due to changes in the product’s base year and adjustments in estimates of foreign direct investment. The current account balance for 2017 is now estimated at 1.36 billion dollars (3.6% of GDP). ECLAC expects 2018 to end with a more modest surplus, mainly as a result of lower export volumes due to reductions in meat and electricity shipments, as well as re-exports to Brazil. The Paraguayan economy has also lost competitiveness with regard to its main trading partners (Brazil and Argentina) due to the severe devaluation of these countries’ currencies.

Average inflation came to 4% in 2018, compared with 3.6% a year earlier, under the limit established by the Central Bank (4%). The monetary policy reference rate remained constant at 5%. The fall in inflation in 2019 led the Central Bank to lower the benchmark rate in March by 25 basis points to 4.75%. With regard to the unemployment rate, the Continuous Employment Survey (ECE), which was only carried out in the capital city of Asunción, was replaced in 2018 by the Continuous Permanent Household Survey (EPHC), which includes data from 16 areas across the country. According to data obtained from this new survey and also to ECLAC, the unemployment rate for the second quarter of 2018 was 5.9%, lower than the 7.3% recorded for the same period in 2017.

Turning to growth projections, ECLAC estimates that the Paraguayan economy will grow around 1.6% in 2019, affected by heavy rains and the decrease in momentum of its main trading partners, Argentina and Brazil. The IMF, meanwhile, estimates growth of 3.5% in 2019.

Insurance market

Growth

The Paraguayan insurance market premiums (annualized at December 2018) reached 2.53 trillion guaranies (441 million dollars), with nominal growth of 8.1% and real growth of 4% (see Chart 3.2.8-b and Table 3.2.8-a). Life insurance premiums, which account for 14% of the total market, grew a nominal 6.9% to 354.42 billion guaranies (62 million dollars), while Non-Life insurance premiums, which represent the remaining 86%, grew a nominal 8.3% to 2.17 trillion guaranies (379 million dollars). All insurance modalities grew in both nominal and real terms except Theft and Personal accident, which were down by 0.3% and 5.4% in nominal terms respectively. In real terms, the lines that posted the highest growth were Miscellaneous risks (20.6%), Other damage (8.3%) and Transport (4.9%).

The Non-Life insurance segment made a strong contribution of 7.1 percentage points to the 8.1% nominal growth registered by the Paraguayan insurance industry in 2018, with the remaining percentage point contributed by the Life insurance segment (see Chart 3.2.8-c).

Balance sheet and equity

Chart 3.2.8-d shows changes in the aggregate balance sheet of the Paraguayan insurance industry over the past decade. The sector’s total assets amounted to 3.76 trillion guaranies (655 million dollars) in 2018, while equity came to 1.43 trillion guaranies (249 million dollars), 12.3 percentage points above the level observed in 2017.

Aggregate capitalization levels in the Paraguayan insurance industry remained high throughout the period. In 2010, equity came to 32.6% of total assets, a figure that has risen gradually to reach 38% in 2018.
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Investment and technical provisions

Changes in investment and technical provisions within the Paraguayan insurance industry between 2008 and 2018 can be seen in Charts 3.2.8-e and 3.2.8-f. Investment totaled 1.49 trillion guaranies (259 million dollars) in 2018, up 15.2% on the figure reported in 2017. Meanwhile, technical provisions in 2018 amounted to 1.51 trillion guaranies (263 million dollars), up 8.1% on the previous year. It should be noted, however, that in the case of both investment and technical provisions, it has not been possible to undertake an additional
breakdown of their composition on the basis of available information.

Technical performance

The technical result of the Paraguayan insurance industry (with data annualized at December 2018) continued to be positive, as shown in Chart 3.2.8-g. The combined ratio recorded in 2018 was 93.7%, compared with 97.3% in 2017, and this improvement of 3.6 percentage points was due both to more moderate operating expenses (1.8 percentage points) and improvements in the efficiency of the loss ratio (1.8 percentage points). The upward trend since 2013 has thus been reversed.

Results and profitability

As on December 2018, the net result of the Paraguayan insurance business was 246.43 billion guaranies, up 45% on the previous year. The strong technical performance in 2018, together with the result of investment, led to significant growth that fiscal year (see Chart 3.2.8-h).

Turning to profitability, the industry achieved return on equity (ROE) of 17.3% in 2018, up 3.9 percentage points on 2017. A similar story emerges in the case of return on assets (ROA), which reached 6.6% in 2018, up 1.5 percentage points on the previous year.

Insurance penetration, density and depth

The main structural trends shaping the development of the Paraguayan insurance industry between 2008 and 2018 can be seen in Chart 3.2.8-i. The penetration index (premiums/GDP) stood at 1.1% in 2018, a similar figure to 2017. As can be seen, the penetration index for the Paraguayan market grew steadily between 2008 and 2015, to then stabilize after that year, lagging behind the average absolute values of the other markets in the region throughout the decade.

Meanwhile, insurance density in Paraguay (premiums per capita) came to 363,289 guaranies (63 dollars), up 6.7% on the level reached in 2017 (340,403 guaranies). The density of the Paraguayan market has steadily increased over the period under analysis, with

### Table 3.2.8-a
Paraguay: premium volume by line of business, 2018

<table>
<thead>
<tr>
<th>Line</th>
<th>Millions of guaranies</th>
<th>Millions of USD</th>
<th>Increase Nominal (%)</th>
<th>Increase Real (%)</th>
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</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,527,763</td>
<td>441</td>
<td>8.1</td>
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<tr>
<td>Life</td>
<td>354,421</td>
<td>62</td>
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<td>2.9</td>
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<tr>
<td>Non-Life</td>
<td>2,173,343</td>
<td>379</td>
<td>8.3</td>
<td>4.2</td>
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<tr>
<td>Automobiles</td>
<td>1,190,254</td>
<td>208</td>
<td>8.0</td>
<td>3.9</td>
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<td>Other lines</td>
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<td>31</td>
<td>12.7</td>
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<td>Fire</td>
<td>189,323</td>
<td>33</td>
<td>0.9</td>
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<tr>
<td>Miscellaneous risks</td>
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<td>36</td>
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<td>29.6</td>
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<td>Transport</td>
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<td>17</td>
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<td>4.9</td>
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<tr>
<td>Theft</td>
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<td>12</td>
<td>-0.3</td>
<td>-4.1</td>
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<td>Surety</td>
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<td>16</td>
<td>4.9</td>
<td>0.9</td>
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<td>Third-party liability</td>
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<td>14</td>
<td>7.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Personal accident</td>
<td>65,417</td>
<td>11</td>
<td>-5.4</td>
<td>-9.0</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Insurance Superintendency, Central Bank of Paraguay)

1/ Net direct premiums for cancellations plus administrative surcharges
cumulative growth of 218% between 2008 and 2018.

Finally, the depth of insurance in the Paraguayan market (Life insurance premiums to total premiums) came to 14%, up 5.3 percentage points on the level reached in 2008 and virtually unchanged from 2017. It should be noted that the depth of the Paraguayan insurance market is well below the average seen across Latin America insurance markets (44.6%).

**Estimation of the Insurance Protection Gap**

Chart 3.2.8-j provides an estimation of the IPG for the Paraguayan insurance market between 2008 and 2018. The insurance gap in 2018 amounted to 15.81 trillion guaranies, 6.3 times the size of the Paraguayan insurance market at the end of that year.

As in many of the region’s insurance markets, the structure and performance of the IPG over the period under analysis shows the significance of the contribution from Life insurance. At the close of 2018, 62.4% of the IPG was a product of Life insurance (9.59 trillion guaranies), almost 1 percentage point less than its share in 2008. The remaining 37.6% of the insurance gap is thus a product of the Non-Life insurance segment (5.95 trillion guaranies). Accordingly, the potential insurance market in Paraguay at the close of 2018 (the sum of the actual insurance market plus the IPG) is estimated at 18.34 trillion guaranies.
which is 7.2 times the size of the total insurance market that year.

Charts 3.2.8-k and 3.2.8-l provide an estimation of the insurance gap as a multiple of the actual insurance market in Paraguay. The IPG as a multiple of the market declined steadily between 2008 and 2018, both for the Life insurance segment (falling from 83.4 to 27.8 times) and the Non-Life segment (from 4.6 to 2.7 times). It should be noted, however, that this trend has plateaued recently and there was almost no change between 2017 and 2018.
Lastly, Chart 3.2.8-m shows the Paraguayan insurance market’s capacity to close the IPG determined in 2018, based on a comparative analysis between the growth rates observed over the past ten years and the growth rates that would be required to close the gap over the next decade.

The Paraguayan insurance market grew at an average annual rate of 13.8% over the last ten years, comprising an annual growth rate of 19.2% in the Life insurance segment and 13.1% in the Non-Life segment. Were the rate of growth observed in the last decade to continue over the next ten years, the growth rate of the Paraguayan insurance market would be insufficient by 1 percentage point to close the gap in the case of the Non-Life insurance segment, and by 20.7 percentage points in the case of the Life insurance segment.

**Market Development Index (MDI)**

Chart 3.2.8-n provides an estimation of the Market Development Index (MDI) for the Paraguayan insurance industry between 2005 and 2018. The MDI, which is used in this report as an indicator of the performance and maturity of the markets analyzed, performed positively during this period. This trend for the most part follows the average level recorded across all Latin American insurance markets.

**Comparative analysis of structural ratios**

Chart 3.2.2-o outlines the state of the Paraguayan insurance market when compared with the average for Latin America, measured in terms of the four structural indicators analyzed in this report: penetration, density, depth and MDI. As can be seen, the Paraguayan insurance market falls well short of the regional average, with the exception of the MDI, which was above the Latin American average.

**Insurance market rankings**

**Overall ranking**

A total of 34 insurance companies were operating in Paraguay at the end of 2018. As can be seen in Chart 3.2.8-p, concentration is not high within the industry. The Herfindahl index increased very slightly in 2018, reaching 732 points by the end of the year compared with 711 in 2017, meaning it is below the moderate concentration threshold. With respect to the CR5 index, the top five companies accounted for 49.1% of total premiums in 2018, which was up 1.1 percentage points on the figure recorded in 2017.

![Chart 3.2.8-h](Paraguay: changes in results and profitability, 2008-2018 (technical and financial results on net accrual premium, %; ROE, %; ROA, %))

Source: MAPFRE Economic Research (with data from the Insurance Superintendency, Central Bank of Paraguay)
Chart 3.2.8-i
Paraguay: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, guaranis and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the Insurance Superintendency, Central Bank of Paraguay)
Turning our attention to the 2018 overall ranking of insurance groups in Paraguay, MAPFRE was still topping the table, with a market share of 17.9%. It was followed some way behind by Aseguradora del Este (11.5%) and La Consolidada (9.8%). Moving out of the top three, Aseguradora Yacyreta has overtaken Tajy Propiedad, with 5% and 4.9% of the market share respectively. The remaining insurance groups maintained the same places as in 2017 (see Chart 3.2.8-q).

**Life and Non-Life rankings**

The 2018 Non-Life ranking was largely unchanged from 2017. MAPFRE still held on to the top spot with 20.3% of market premiums, followed some distance behind by La Consolidada (9.9%), Aseguradora del Este (9.5%), Yacyreta (5.4%) and Tajy (5.2%). Changes were seen lower down the table, with Sancor (4.6%) and Patria (4%) overtaking Seguridad (3.9%) and pushing it into eighth place. At the bottom of the table was Alianza Garantía (2.6%),
taking the place occupied by El Comercio Paraguayo in 2017.

In the Life ranking, only the top four positions remained unchanged in 2018, with Aseguradora del Este accumulating 23.9% of total premiums, followed at some distance by Cenit (13.8%), Patria (9.5%) and La Consolidada (8.8%). Meanwhile, Seguridad (7.3%) has overtaken Panal (5%) and Grupo General (5.5%). At the bottom of the table were Regional (5.1%) in seventh place with Tajy (3.3%) in last place (see Chart 3.2.8-r).
Key regulatory aspects

Finally, Table 3.2.8-b lists the key general regulatory adjustments made by the regulatory body governing the Paraguayan insurance market in 2018.
THE LATIN AMERICAN INSURANCE MARKET IN 2018

Chart 3.2.8-p
Paraguay: insurance industry concentration, 2011-2018
(Herfindahl index; CR5 index, %)

Source: MAPFRE Economic Research (with data from the Insurance Superintendency, Central Bank of Paraguay)

Chart 3.2.8-q
Paraguay: overall ranking, 2017-2018
(market shares, %)

Source: MAPFRE Economic Research (with data from the Insurance Superintendency, Central Bank of Paraguay)
The Latin American Insurance Market in 2018

Chart 3.2.8-r
Paraguay: Life and Non-Life ranking, 2017-2018 (market shares, %)

<table>
<thead>
<tr>
<th>Life</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aseguradora del Este</td>
<td>23.9%</td>
<td></td>
</tr>
<tr>
<td>Cenit</td>
<td>13.8%</td>
<td></td>
</tr>
<tr>
<td>Patria</td>
<td>9.5%</td>
<td></td>
</tr>
<tr>
<td>La Consolidada</td>
<td>8.8%</td>
<td></td>
</tr>
<tr>
<td>Seguridad</td>
<td>7.3%</td>
<td></td>
</tr>
<tr>
<td>Grupo General</td>
<td>5.5%</td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td>5.1%</td>
<td></td>
</tr>
<tr>
<td>Panal</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>MAPFRE</td>
<td>3.7%</td>
<td></td>
</tr>
<tr>
<td>Tajy</td>
<td>3.3%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Life</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAPFRE</td>
<td>20.3%</td>
<td></td>
</tr>
<tr>
<td>La Consolidada</td>
<td>9.9%</td>
<td></td>
</tr>
<tr>
<td>Aseguradora del Este</td>
<td>9.5%</td>
<td></td>
</tr>
<tr>
<td>Yacyreta</td>
<td>5.4%</td>
<td></td>
</tr>
<tr>
<td>Tajy</td>
<td>5.2%</td>
<td></td>
</tr>
<tr>
<td>Sancor</td>
<td>4.6%</td>
<td></td>
</tr>
<tr>
<td>Patria</td>
<td>4.0%</td>
<td></td>
</tr>
<tr>
<td>Seguridad</td>
<td>3.9%</td>
<td></td>
</tr>
<tr>
<td>Paraguay</td>
<td>3.2%</td>
<td></td>
</tr>
<tr>
<td>Alianza Garantia</td>
<td>2.6%</td>
<td></td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Insurance Superintendency, Central Bank of Paraguay)

Table 3.2.8-b
Paraguay: recent regulatory developments in insurance matters

<table>
<thead>
<tr>
<th>Regulation</th>
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Source: Insurance Superintendency, Central Bank of Paraguay
3.2.9 Argentina

Macroeconomic environment

In 2018, the Argentine economy fell into recession, with a real GDP fall of 2.5% compared to growth in 2017 of 2.7% (see Chart 3.2.9-a). The value of the Argentine peso dropped sharply due to the combination of a number of adverse factors, among them tougher United States monetary policy, severe droughts, structural vulnerabilities affecting its current account due to high short-term foreign indebtedness in dollars, a low level of reserves of this currency and high inflation, all of which forced a request to the International Monetary Fund (IMF) for financial support. The terms agreed with the IMF led to the application of restrictive fiscal and monetary policies aimed at curbing the deterioration of public accounts and controlling currency depreciation.

The current account deficit increased in 2018 to 5.2% of GDP (from 4.8% in 2017). High levels of external debt and currency pressures in real terms continued to undermine the deficit imbalance. The rate of inflation (calculated by the City of Buenos Aires and published by the National Institute of Statistics and Censuses as Alternative CPI) stood at 47.4% in the last quarter of the year. There was, meanwhile, an increase in unemployment, which reached 9.1% in the final quarter (up from 7.2% in 2017). The fiscal deficit came to 5% of GDP, lower than that recorded in 2017 (5.9%), as a result of expansive fiscal policy. Gross public debt accounted for 84.3% of GDP at the close of 2018 (up from 52.9% in 2017). This sharp increase is a result of the new financial liabilities incurred during the year to finance the deficit and of the accounting effect of the increase in the exchange rate on the valuation of debt in foreign currency.

MAPFRE Economic Research expects a further contraction of the Argentine economy in 2019 of approximately 1.5%. ECLAC, on the other hand, estimates a contraction of 1.8%, an improvement on the 2018 figure as it expects a slight recovery in families’ real income, an improvement in crop production and the continuation of the growth of trading partners, all of which would have a positive impact on private consumption, investments and exports. Finally, the IMF puts its growth forecast for the Argentine economy in 2019 at -1.2%.

Insurance market

Growth

The premium volume of the Argentine insurance market (annualized as on December 2018) stood at 391.59 billion pesos (13.93 billion dollars), representing a nominal increase of 29.5%, while in real terms there was a contraction of 3.5% compared to the same period in the previous year (see Chart 3.2.9-b and Table 3.2.9).

Life insurance premiums, which accounted for 13.5% of the total market, grew 23.9% in nominal terms and decreased by 7.7% in real terms to reach 52.75 billion pesos (1.88 billion dollars). All modalities had nominal increases; the highest was in individual Life insurance, which was the only modality to obtain an increase in premiums in real terms (15.1%).

Non-Life insurance premiums, which account for 86.5% of the market, grew 30.5% in nominal terms (down 2.8% in real terms) to reach 338.85 billion pesos (12.05 billion dollars). While all lines registered positive growth in 2018, in real terms the Health, Personal accident and Automobile lines fell by 8.4%, 6.2% and 1.4% respectively.

As shown in Chart 3.2.9-c, the nominal growth of 29.5% recorded by the Argentine insurance market in 2018 was down to a positive contribution of 3.3 percentage points from the Life insurance segment and of 26.2 percentage points from the Non-Life segment.
Balance sheet and equity

Chart 3.2.9-d shows changes in the aggregate balance sheet for the Argentine insurance sector between 2008 and 2018. Total assets amounted to 728.42 billion pesos (29.9 billion dollars) and equity stood at 163.81 billion pesos (5.83 billion dollars).

Aggregate capitalization levels within the sector (measured on total assets) were close to 20% between 2008 and 2018, the highest value being in 2018 with 22.5% of the total assets.

Investments

Charts 3.2.9-e, 3.2.9-f and 3.2.9-g show the performance, structure and composition of the...
Investment in the Argentine insurance industry reached 562.54 billion pesos (14.93 billion dollars) in 2018, with the majority concentrated in fixed income (62.8%), mutual funds (25.2%) and, to a lesser extent (7.5%), in equities. Notably, the value of amounts managed through mutual funds increased throughout the period under analysis, rising from 10% of total investment in 2008 to 25.2% by 2018.

Technical provisions

Charts 3.2.9-h, 3.2.9-i and 3.2.9-j illustrate the performance and structure of technical provisions in the Argentine insurance industry over the past decade. In 2018, technical provisions stood at 456.67 billion pesos (12.18 billion dollars). Life insurance accounted for 30.4% of the total, while unearned premiums and unexpired risks in Non-Life insurance accounted for 14.3% and the provision for...
outstanding losses for the remaining 55.3%. As can be seen in Chart 3.2.9-i, provisions for Life insurance experienced a significant loss of weight between 2008 and 2018 in terms of overall technical provisions, falling from 51.3% to 30.4%, although in 2018 there was an upturn of 2.7 percentage points.

Technical performance

As in 2017, the technical result from the Argentine insurance business was negative in 2018. The combined ratio was 126%, 13.3 percentage points higher than the previous year. The industry's main indicator continued to show levels above 100%, but the increase in operating expenses of 5.5 percentage points and, to a greater extent, the recovery of the loss experience by 7.8 percentage points led to the deterioration of its technical performance (see Chart 3.2.9-k).

Results and profitability

With data annualized as on December, Argentine insurance companies posted a net result of 46.79 billion pesos (1.67 billion dollars), with a nominal growth of 69.8% compared with the previous year. This was due to the positive effect of the financial result and in spite of the worse technical performance discussed in the previous paragraph.

Return on equity (ROE) stood at 28.6% in 2018, up 3.8 percentage points on 2017. Return on assets (ROA) was also up, reaching a value of 6.4% in 2018, up 0.9 percentage points on 2017 (see Chart 3.2.9-l).
Insurance penetration, density and depth

Chart 3.2.9-m shows the main structural trends shaping the development of the Argentine insurance industry between 2008 and 2018. Firstly, the penetration index (premiums/GDP) stood at 2.7%. After a period of stagnation between 2008 and 2011, the indicator began to grow steadily, in line with the wider trend observed in Latin America as a whole. Since 2015, however, there has been a downward trend as the indicator has fallen again.

Insurance density (premiums per capita) reached 8,827 pesos (314 dollars), 28.3% higher than the value observed in 2017 (6,881 pesos). Density has followed a growing trend over the last decade; however, its positive measurement...
Turning our attention to depth (Life insurance premiums to total premiums), the indicator for 2018 came to 13.5%, 8.9 percentage points below the value observed in 2008. In this case, the Argentine insurance market diverges...
considerably from the average trend observed across Latin America, illustrating the relative deterioration of the Life insurance segment over the past decade.

**Estimation of the Insurance Protection Gap**

Chart 3.2.9-n provides an estimation of the insurance protection gap for the Argentine insurance market between 2008 and 2018. The IPG stood at 728.35 billion pesos in 2018, equivalent to 1.9 times the size of the actual insurance market at the end of that year.

The structure and performance of the insurance gap between 2008 and 2018 shows the significant role Life insurance had in shaping it. In 2008, 73.6% of the IPG was from Life insurance, which amounted to 49.3 billion pesos. By 2018, however, this had risen to 78.4% (571.1 billion pesos). By contrast, the contribution of Non-Life insurance to the IPG fell from 26.6% to 21.6% over the period, from 17.9 billion pesos to 157.25 billion pesos in that time. The potential insurance market in Argentina in 2018 (sum of the actual market plus the IPG) reached 1.12 trillion pesos, almost 2.9 times the size of the total insurance market in the country that year.

Chart 3.2.9-o provides an estimation of the IPG as a multiple of the actual market each year. As explained previously in this report, this comparison allows us to gauge trends and patterns in the gap. As a multiple of the actual market, the IPG for the Argentine insurance market has followed a downward trend over the past decade, both in terms of the overall market (from 2.6 to 1.9 times) and in the Non-Life segment (from 0.9 to 0.5 times). However, this trend is reversed in the Life insurance segment, in which the gap rose from 8.4 to 10.8 times between 2008 and 2018. It is important to emphasize how the behavior of the IPG as a multiple of the actual market has changed in recent years; from 2015 onward in the case of the Non-Life insurance segment, and from 2016 in the Life segment.

To complement this analysis, Chart 3.2.9-p summarizes the change in the IPG as a multiple of the actual market for the Life and Non-Life segments and for the total Argentine insurance market, comparing the situation in 2018 with that of 2008. As can be seen, only the
Chart 3.2.9-m
Argentina: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, pesos and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: MAPFRE Economic Research (with data from the country's insurance superintendency)
Non-Life line saw an improvement during this period, and this improvement was marginal. In the case of the Life segment, the situation has worsened.

Lastly, Chart 3.2.9-q outlines the capacity shown by the Argentine insurance market to close the IPG determined in 2018, by means of a comparative analysis between the growth rates observed in the market over the last ten years and the growth rates that would be needed to close the IPG over the next decade. According to this analysis, the Argentine insurance market recorded an average annual growth rate of 31.1% between 2008 and 2018. This was underpinned by an average growth of 24.6% in the Life insurance segment and 32.5% in the Non-Life segment.

Were this growth rate to continue over the next ten years, the growth rate of the market as a whole would be sufficient to close the IPG established in 2018 as far as Non-Life insurance is concerned. However, the Argentine insurance market would require an annual growth rate of 28% (3.4 percentage points higher than the value observed over the last decade) over the next ten years in the Life segment.
segment to close the IPG estimated in 2018. It should also be noted that in the case of Argentina, the shortfalls resulting from this analysis tend to be underestimated due to the high inflation rates observed in this economy.

**Market Development Index (MDI)**

Chart 3.2.9-r provides an estimation of the Market Development Index (MDI) for the Argentine insurance industry between 2005 and 2018. As can be seen, the indicator shows a trend that diverges considerably from the trend observed across Latin America as a whole. The MDI fell between 2008 and 2013, recovered in subsequent years then fell again in 2017 and 2018; a behavior that is strongly influenced by the trends noted above in relation to the performance of the Life insurance segment.

**Comparative analysis of structural ratios**

Finally, Chart 3.2.9-s outlines the state of the Argentine insurance market compared with the average for Latin America, measured in terms of the structural indicators analyzed in this report. It shows that both the MDI and depth are well below the average in this region; however, penetration is on par and density exceeds the average (excluding the effect that high inflation has on both indicators)\(^{11}\).
Insurance market rankings

Overall ranking

A total of 189 insurance companies were operating in Argentina in 2018, 6 more than the previous year. The Herfindahl and CR5 indexes show a very low degree of concentration, albeit with a slight upturn from 2014 (see Chart 3.2.9-t).

In the overall ranking of the largest insurance groups operating in Argentina in 2018, the top three companies maintained their positions when compared with the previous year: Sancor (10.3%), Provincia (7.8%) and Federación Patronal (7.2%). They were followed by Zurich (6.4%), which, following its purchase of QBE, has overtaken Caja Seguros and San Cristóbal, on 5.6% and 5.4% respectively. These were then followed by Werthein and Nación, with insurer Galeno in tenth place (see Chart 3.2.9-u).

Life and Non-Life rankings

Given the importance of the Non-Life insurance segment in the Argentine market, the companies featured in the 2018 Non-Life ranking were practically the same as those that appeared in the overall ranking. Sancor topped the table with 11.5% of total market premiums. It was followed by Federación Patronal (8.2%) and Provincia (8.1%), which have swapped places, and then San Cristóbal (6.2%). Next was Segunda, which has overtaken Caja Seguros; they had market shares of 5.8% and 5.6% respectively. In the bottom half of the table were Zurich and Rivadavia, followed by Galeno and Werthein.
In the 2018 Life ranking, the first 5 companies maintained their 2017 positions. Zurich topped the table with 12.9% of the premiums, followed by Werthein, Nación, Provincia and Caja Seguros, with 8.5%, 6.3%, 6.2% and 5.8% of the market share respectively. Prudential (4.6%) has overtaken Metlife (3.6%), and HSBC (3.4%) has overtaken Sancor (3.1%). This year, Cardif Seguros (2.5%), rather than BBVA Seguros, was in tenth place (see Chart 3.2.9-v).

**Key regulatory aspects**

According to information obtained from the Argentine National Superintendency of Insurance, the following regulations apply:

- **Moderate concentration threshold**: 40%
- **High concentration threshold**: 45%

![Chart 3.2.9-t](chart.png)

*Source: Source: MAPFRE Economic Research (with data from the country’s insurance superintendency)*

![Chart 3.2.9-u](chart.png)

*Source: MAPFRE Economic Research (national insurance superintendency)*
Insurance, the following key regulatory developments have recently unfolded:

- Resolution 1119/18: making improvements to corporate governance.
- Resolution 126/18: making amendments to the General Regulations on Insurance Activities in order to ensure the implementation of microinsurance, the purpose of which is to expand the Argentine insurance base by offering simple, time-limited coverage providing a quick resolution in the event of an incident.
- Resolution 219/18: modifying Article 11 of Law 17.418 through Article 13 of Law 27.444, to speed up and simplify the means through which the public can prove the existence of insurance coverage.
- Resolutions 01/18 and 1008/18: introducing an Information System called “End Beneficiary”, which will aim to identify shareholders, private individuals and legal entities in the local insurance or reinsurance business, components of economic groups or conglomerates and end beneficiaries.
- Resolution 741.2018: establishing the possibility for regulated companies to adopt different valuation criteria for investments which hold to maturity.
- Resolution 818.2018: the National Superintendency of Insurance introduced regulations so that the companies it regulates could invest in contributions in entrepreneurial capital institutions listed in the Register of Entrepreneurial Capital Institutions (RICE) created by Law 27349, up to a maximum of 1% of their total investments.
- Resolution 1022.2018: including within computable investments the opportunity for insurers to invest in marketable securities loans as a lender, in accordance with the provisions of the National Securities Commission, up to a maximum of 10% of their total investments.
- Resolution 1116.2018: increasing nominal amounts to credit capital per branch.
Quarters are established to gradually adapt to the highest minimum capital requirement per branch. For the calculation of capital for premiums and claims, the lower percentage limit applicable for the reinsurer to participate is modified and that percentage is established by groups of branches, rather than being uniform across all branches, taking into account cession/retention over the last five years. Capital cannot be replaced by reinsurance contracts.

• Resolution 1046.2018: making amendments to section 32 of the General Regulations on Insurance Activities (Resolution 38708/14). This section establishes the levels of risk and/or event retention that insurance companies may assume in order to maintain a suitable relationship between retained risks and their solvency. The first of these changes concerns the parameters used to calculate the retention capacity. In order to use parameters that more accurately reflect the solvency of the insurance company, using only computable capital was considered (instead of the maximum between this and equity), as computable capital is used to adjust the deficit/surplus in matters of capital. In order for insurers to predict the reinsurance coverages to contract as a result of this change, a gradual adjustment schedule to be completed by June 30, 2021 was included. The second modification was that companies which do not fulfill the parameters provided in terms of retention must inform the Legal and Technical Management of the National Superintendency of Insurance of the amounts and the plan of action to be adopted in order to comply with the provisions of point 32.1 on retentions.

• PEN Decree No. 59/2019: a regulatory decree under Art. 81 of the Income Tax Law, increasing tax deductions for Life and retirement insurance premiums.

• Resolution 93.2019: modifying the calculation method for the companies covering workplace risks so as to standardize this calculation for the whole insurance market.

• Resolution 118.2019: to comply with national regulations, the National Superintendency of Insurance included regulations imposed by the Argentine Federation of Professional Councils in Economic Sciences (FACPCE) for the restatement of financial statements.

• Resolution 1162/2018: increasing Compulsory Third-Party Liability Insurance (or SORC) coverage limits, as well as the limits on Medical and Funeral expenses. It also establishes new standard limits for Voluntary Third-Party Liability Insurance for Motor Vehicles and/or Towing.

• Resolution No. 93: introducing new regulations on technical reserves for shortfalls in premium. As established by Law 20.091, the National Superintendency of Insurance decided to modify the criteria for determining outstanding claims and technical reserves.

3.2.10 Uruguay

Macroeconomic environment

The Uruguayan economy grew 2.1% in real terms in 2018, compared with 2.7% the previous year (see Chart 3.2.10-a). This slowdown was largely driven by the easing off of external demand and a decrease in the price of raw materials, in line with the rest of the region. Tourism revenue has again shown an upward trend, although this appears to be slowing down this year, while the oil refining sector has contributed the most to the growth since its revival in 2018. However, adverse weather undermined part of this contribution. The fiscal deficit remained negative, at around -2%. Despite advances in regulations in 2018, the problems of increasing social security benefits and adhering to the time line for universal access to the National Health Fund remain unresolved. As a result, public debt totaled over 50% of GDP at the end of the year.
Average inflation in 2018 stood at 7.6% (up from 6.2% in 2017), slightly above the target range set by monetary policy (between 3% and 7%). This was driven by the currency depreciations in the second half of the year, which led the Central Bank to become more restrictive. The unemployment rate reached 8.4%. With regard to growth forecasts for 2019, ECLAC estimates a rate below 1 percentage point, while the IMF predicts growth of 1.9%.

**Insurance market**

**Growth**

After the extraordinary growth seen in 2017, the Uruguayan insurance market’s performance was more modest in 2018, achieving a premium volume of 45.79 billion pesos (1.49 billion dollars), representing nominal growth of 1.3% and a decrease of 5.9% in real terms in comparison with the previous year (see Chart 3.2.10-b and Table 3.2.10). This is due to the decline in Life insurance, which accounts for 39.7% of the total market, and a moderate growth in the Non-Life lines, which account for the remaining 60.3% of the market.

Life insurance reached a premium volume of 18.2 billion pesos (592 million dollars), a decrease of 4.6% in nominal terms compared with the previous year and of 11.4% without taking into account the effects of inflation. The most significant fall has occurred in pension insurance, in which premiums fell by 12.2%, compared with a 13.9% increase in non-pension insurance. Premiums for Non-Life lines reached 27.6 billion pesos (898 million dollars), with a nominal growth of 5.6% compared with the previous year and a decrease in real terms of 1.9%. In the Non-Life segment, all modalities grew in nominal terms, while in real terms, the Automobile (-5.3%), Workplace accidents (-2.7%), Other (-2.2%) and Credit and/or surety (-0.3%) lines all recorded contractions.

The Uruguayan insurance market’s nominal growth of 1.3% in 2018 is thus explained by a positive contribution of 3.2 percentage points from the negative Non-Life insurance segment and the negative contribution of -1.9 percentage points from the Life insurance segment. It should be noted that for the first time in the last decade, neither segment contributed positively to the growth of the Uruguayan insurance industry (see Chart 3.2.10-c).

**Balance sheet and equity**

Chart 3.2.10-d shows changes in the aggregate balance sheet of the Uruguayan insurance industry between 2008 and 2018. As can be seen, total assets in the sector amounted to 162.31 billion pesos (5 billion dollars) in 2018,
while equity stood at 20.17 billion pesos (622 million dollars), up 9.4% on the value observed in 2017.

Changes in the aggregate capitalization levels of the Uruguayan insurance sector (relative to total assets) are also worth highlighting. In 2008, these stood at around 14%, and have since progressed, representing 27.5% of the total assets at the end of 2018.

**Investments**

Changes in investments and the composition of the aggregate portfolio in the Uruguayan insurance sector between 2008 and 2018 are displayed in Charts 3.2.10-e, 3.2.10-f and 3.2.10-g. As can be seen, total investments in this sector reached 144.81 billion pesos (4.47 billion dollars), with 87.3% concentrated in fixed income and equities, 12.4% in other financial investments (mainly bank deposits), 0.3% in real estate investments and the remaining 0.02% in cash. It is also worth highlighting the change in the relative weight of real estate investments in the aggregate portfolio, which fell from 5.8% of the portfolio in 2008 to only 0.3% in 2018.

**Technical provisions**

Charts 3.2.10-h, 3.2.10-i and 3.2.10-j show the structure and changes to technical provisions in the Uruguayan insurance industry between 2008 and 2018. As can be seen, technical provisions reached 133.51 billion pesos (4.12 billion dollars) in 2018. 66.5% of total provisions related to Life insurance, 5.3% to provisions for unearned premiums and unexpired risks in Non-Life insurance and the remaining 28.2% to the provision for outstanding losses.

The relative weight of the Life insurance technical provision grew steadily between 2008 and 2018, from 50.1% of total provisions in 2008 to 66.5% in 2018.

### Table 3.2.10

Uruguay: premium volume\(^1\) by line of business, 2018

<table>
<thead>
<tr>
<th>Line</th>
<th>Millions of pesos</th>
<th>Millions of USD</th>
<th>Increase Nominal (%)</th>
<th>Increase Real (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>45,787</td>
<td>1,490</td>
<td>1.3</td>
<td>-5.9</td>
</tr>
<tr>
<td>Life</td>
<td>18,196</td>
<td>592</td>
<td>-4.6</td>
<td>-11.4</td>
</tr>
<tr>
<td>Pension</td>
<td>11,861</td>
<td>386</td>
<td>-12.2</td>
<td>-18.4</td>
</tr>
<tr>
<td>Non-Pension</td>
<td>6,335</td>
<td>206</td>
<td>13.9</td>
<td>5.8</td>
</tr>
<tr>
<td>Non-Life</td>
<td>27,591</td>
<td>898</td>
<td>5.6</td>
<td>-1.9</td>
</tr>
<tr>
<td>Automobiles</td>
<td>10,797</td>
<td>351</td>
<td>1.9</td>
<td>-5.3</td>
</tr>
<tr>
<td>Other lines</td>
<td>2,316</td>
<td>75</td>
<td>5.2</td>
<td>-2.2</td>
</tr>
<tr>
<td>Fire</td>
<td>2,319</td>
<td>75</td>
<td>17.1</td>
<td>8.8</td>
</tr>
<tr>
<td>Transport</td>
<td>972</td>
<td>32</td>
<td>14.6</td>
<td>6.5</td>
</tr>
<tr>
<td>Third-party liability</td>
<td>637</td>
<td>21</td>
<td>15.1</td>
<td>7.0</td>
</tr>
<tr>
<td>Theft</td>
<td>658</td>
<td>21</td>
<td>26.0</td>
<td>17.1</td>
</tr>
<tr>
<td>Surely and credit</td>
<td>607</td>
<td>20</td>
<td>7.3</td>
<td>-0.3</td>
</tr>
<tr>
<td>Workplace accidents(^2)</td>
<td>9,287</td>
<td>302</td>
<td>4.8</td>
<td>-2.7</td>
</tr>
</tbody>
</table>

Source: Source: MAPFRE Economic Research (with data from the Uruguay Central Bank)

1/ Net issued premiums for cancellations
2/ The volume of “Workplace accident premiums corresponds to the State Insurance Bank.
Technical performance

In 2018, the situation was the opposite of what had been observed the previous year: an increase of 4.6 percentage points in the expense ratio (despite a decrease in the loss ratio of 2.7 percentage points) led the combined ratio to fall by 1.9 percentage points to 107.8%. In spite of this, from a medium-term standpoint there has been a slight downward trend in expenses and an upward trend in the loss ratio (see Chart 3.2.10-k).

Results and profitability

The net result for the Uruguayan insurance sector in 2018 was 574 million pesos (19 million dollars), 73.6% less than the previous year. This was due to a downturn in the technical result and a slight decrease in the financial result. Chart 3.2.10-l shows that over the last decade, the profitability of the sector has been largely sustained by the financial result, which was offsetting the negative technical result.

On the subject of profitability, the return on equity (ROE) amounted to 2.8% in 2018, a fall of 9 percentage points compared with 2017. In similar fashion, return on assets (ROA) stood at
0.4% in 2018, down 1.2 percentage points on 2017, in contrast to the rise in both these indicators in 2017.

Insurance penetration, density and depth

Chart 3.2.10-m shows the main structural trends shaping the development of the Uruguayan insurance industry between 2008 and 2018. Firstly, the penetration index (premiums/GDP) stood at 2.5% in 2018, 0.8 percentage points higher than the level recorded in 2008, but 0.2 percentage points lower than the value the previous year. From a medium-term standpoint, the market penetration index has grown steadily during the period under analysis, but it is still below the average absolute values of the other markets in the region.

Insurance density in Uruguay (premiums per capita) amounted to 13,274 pesos (432 dollars), up 0.9% on the level reached in 2017 (13,154 pesos). There was a growing trend in density (measured in local currency) over the period under analysis, registering cumulative growth of 311% between 2008 and 2018.

Finally, depth of insurance in the Uruguayan market (Life insurance premiums to total premiums) was at 39.7%, 19.3 percentage points above the level reported in 2008. The growth in depth of the Uruguayan market has closely followed the average trend observed across all Latin American insurance markets.
Estimation of the Insurance Protection Gap

Chart 3.2.10-n provides an estimation of the Insurance Protection Gap for the Uruguayan insurance market between 2008 and 2018. As can be seen, the IPG stood at 96.3 billion pesos (3.13 billion dollars) in 2018, 2.1 times the size of the Uruguayan insurance market at the end of that year. The structure and performance of the IPG over the period under analysis have been mainly shaped by the Life insurance segment. At the close of 2018, Life insurance accounted for 63.3% of the IPG (60.95 billion pesos), 6 percentage points below the share for this segment in 2008. The remaining 36.7% of the 2018 insurance gap is a product of the Non-
Life insurance segment (35.35 billion pesos). The potential insurance market in Uruguay at the close of 2018 (the sum of the actual market plus the IPG) was therefore estimated at 142.08 billion pesos (4.62 billion dollars), 3.1 times the size of the total insurance market in that year.

Chart 3.2.10-o provides an estimation of the Uruguayan market insurance gap as a multiple of the actual insurance market. The IPG as a multiple of the market fell steadily between 2008 and 2018, both in the Life insurance segment, which fell from 12.8 to 3.3 times, and
in the Non-Life insurance segment to a lesser extent, falling from 1.5 to 1.3 times. However, between 2017 and 2018 the opposite is true in terms of the overall analysis of Life and Non-Life, owing to the performance of the aforementioned market.

Chart 3.2.10-p summarizes the change in the IPG as a multiple of the actual market in the Life and Non-Life insurance industries and in the Uruguayan insurance market as a whole by comparing the situation in 2018 with 2008. It is clear that the Uruguayan insurance market improved substantially in the Life segment, while in the Non-Life segment it hardly improved in terms of the gap as a multiple of the actual market.

Finally, Chart 3.2.10-q provides an overview of the Uruguayan insurance market’s capacity to close the IPG determined in 2018, based on a comparative analysis between the growth rates observed over the past ten years and the growth rates that would be required to close the gap over the next decade. The Uruguayan insurance market registered average annual growth of 15.6%, consisting of an annual growth rate of 23.5% in the Life insurance segment and 12.4% in the Non-Life segment. If the same growth rates observed over the last decade were maintained over the next ten years, the growth rate of the Uruguayan insurance market would be sufficient to close the insurance gap estimated for 2018 during this time. It should be noted that the level of this sufficiency fell in comparison with the same analysis featured in the 2017 report.

**Market Development Index (MDI)**

Chart 3.2.10-r provides an estimation of the Market Development Index (MDI) for the Uruguayan insurance industry between 2005 and 2018. In this case, the MDI showed a positive trend throughout the period under analysis, and from 2013 onwards surpassed the average performance of Latin American insurance markets. However, the indicator fell in 2018, in accordance with market performance.

**Comparative analysis of structural ratios**

Finally, Chart 3.2.10-s summarizes the state of the Uruguayan insurance market in 2018 compared with the Latin American average, measured in terms of the structural indicators analyzed in this report: penetration, density, depth and MDI. As can be seen, penetration and depth are still below the average for the region; however, the Uruguayan market exceeds the regional average for density and for estimated MDI.
Chart 3.2.10-m
Uruguay: changes in penetration, density and depth, 2008-2018
(premiums / GDP, %; premium per capita, pesos and USD; Life insurance premiums/total premiums, %, index 2008=100)

Source: Source: MAPFRE Economic Research (with data from the Uruguay Central Bank)
Insurance market rankings

Overall ranking

There were 16 insurance companies operating in Uruguay by the end of 2018: 15 private companies and one state-owned company (the Banco de Seguros del Estado, or BSE), which has a monopoly in the Workplace Accidents line. As indicated in previous reports, this has created a highly concentrated insurance market, with high Herfindahl and CR5 index values maintained over the years (see Chart 3.2.10-t).

BSE was top of the overall ranking of the Uruguayan insurance market in 2018 with 65.8% of total premiums (down 3.1 percentage points on 2017), followed by MAPFRE (8.8%) and Sura (7.3%). The rest of the companies making up the ranking remained the same as the previous year, although the insurers in the last four places had changed (see Chart 3.2.10-u).
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Life and Non-Life rankings

In the 2018 Non-Life ranking, the BSE accumulated 61.4% of the market share (1.5 percentage points fewer than the previous year), followed by Sura (11.1%) and MAPFRE (8.4%). The remaining companies retained similar places and market shares to 2017, with the exception of HDI (1.5%), which moved up two places, and Southbridge (1.4%), which fell two places (see Chart 3.2.10-v). BSE also topped the Life ranking with 72.6% of premiums (down 4.6 percentage points on 2017), followed by MAPFRE (9.4%) and MetLife (5.7%).

Key regulatory aspects

With regard to the key regulatory adjustments made to the operation of the Uruguayan insurance industry, the following regulations introduced in 2018 by the Central Bank of Uruguay, an institution which oversees and regulates this activity, stand out:

- Circulars No. 2318 and 2319 of January 2019: regarding the initial income provided to people insured under the scheme. The aim is to provide them with full information about the value of the initial income due to them when they retire.

- Circulars No. 2311, 2312, 2313 and 2314 of December 2018: regarding suitable
regulations on the prevention of money laundering and financing terrorism in line with the new legal framework and FATF recommendations. The intention is to align Central Bank regulations with the new national and international requirements in this area.

- Circulars No. 2302 and 2303 of June 2018: concerning requirements for responding to applications for compulsory automobile insurance coverage. The aim is to strengthen the guidelines framework linked to the protection of financial service users, allowing the processes to start once the insurance company refuses indemnification.

With regard to regulations coming into effect in 2019, the following projects are of note:

- Modifications to the regulations on the prevention of money laundering and financing terrorism included in the Comprehensive Anti-Terrorism Act. The aim is to adapt regulations to the new legal framework (once the Comprehensive Anti-Terrorism Act has been brought in) and relevant FATF Recommendations. Planning this initiative is dependent on the passing of the Act.

- The revision of regulations on outsourcing. The revisions intend to clarify regulations in this area, standardizing requirements and defining more clearly which activities require authorization and which will be considered authorized, subject to compliance with certain conditions. These regulations are expected to be issued during the third quarter of the year.
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- Aligning regulations on insurance matters to the new legal framework. The aim is to align Central Bank regulations with new requirements on the allocation of assets to pension reserves and their separate exposure, and to modify regulations protecting those insured (such as the content of policies). This regulation is expected to be issued during the fourth quarter of the year.

- The regulation of the Register of Life Insurance Policies. The aim is to provide information to third parties about the Life insurance policies of deceased persons. Information on the requirements is

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**Chart 3.2.10-t**

Uruguay: insurance industry concentration, 2008-2018

(Herfindahl index; CR5 index, %)

**Chart 3.2.10-u**

Uruguay: overall ranking, 2017-2018

(market shares, %)

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Source: Source: MAPFRE Economic Research (with data from the Uruguay Central Bank)
expected to be released in the second quarter of the year.

- The revision of the guidelines framework relating to technical reserves and lines of business. The aim is to update regulations on technical reserves (gross reserves; including unplanned reserves, such as reserves for shortfalls in premium; changes in the calculation methodology to adequately reflect future commitments, such as modifications to the method of calculation of the reserve for unexpired risks (unearned premium), estimation of reserves for outstanding claims based on the last expected loss, etc.) and clarifying lines of business definitions. This regulation is expected to be issued during the fourth quarter of the year.

Chart 3.2.10-v
Uruguay: Life and Non-Life ranking, 2017-2018
(market shares, %)

Source: Source: MAPFRE Economic Research (with data from the Uruguay Central Bank)
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2/ Source: Swiss Re


4/ The decrease in the Non-Life segment for the Latin American insurance market as a whole was -4.0%. Table 2.1-c indicates a -3.3% decrease, as it does not consider Venezuela’s data, which are not available with that level of breakdown. The same is true of the decrease in the total market, which was -5.5%, and which appears as -5.1 percent in Table 2.1-c for the same reason indicated.


6/ The penetration, density and depth data, as well as the measurement of the Insurance Protection Gap (IPG) and the Market Development Index (MDI) for 2017 and prior years may show differences from those presented in the 2017 report (MAPFRE Economic Research [2018], *The Latin American insurance market in 2017*, Madrid, Fundación MAPFRE), by virtue of updates to insurance premium figures in Latin American markets reported by supervisory agencies, adjustments in the gross domestic product data published by the corresponding entities in each country, and adjustments to insurance market penetration parameters used in the IPG estimation as a result of updates to insurance premium and gross domestic product figures.

7/ As noted in previous versions of this report, the Insurance Protection Gap (IPG) is not a static concept that involves an invariable amount in time. This potential insurance coverage area is continually modified by the growth of the economy of each country and by the emergence of new risks to be covered and inherent in the nations’ economic and social development. Because of its characteristics, the IPG is strongly correlated with market growth. Quantitatively, the gap is reduced as the penetration rate increases, and qualitatively the gap also tends to decrease as markets become more sophisticated and mature. Hence, factors such as sustained economic growth, low inflation, higher personal disposable income, the general development of the financial system, an efficient regulatory framework, and the application of public policies aimed at increasing financial inclusion and education are factors unleashing a decrease in the IPG.

8/ Methodologically, the IPG can be estimated in two ways. The first, in an *ex post* focus, is based on observed losses. In this case, the IPG is the difference between economic recorded losses at a specific period and the portion of said losses that were covered through the mechanism of insurance compensation. The *ex-ante* approach analyzes optimal coverage amounts which are estimated as the difference between socioeconomic amounts suitable to cover risk compared to true coverage. The second approach was selected for this fiscal year’s report, which involved determining the spread between the optimal and real covered amounts, contemplated as the differential between penetration indexes of each Latin American insurance market with respect to an average of advanced markets (United States, Canada, Japan and 27 countries of the European Union).

9/ The Market Development Index (MDI) is an indicator that synthesizes the trend in the evolution and maturity of insurance markets. The MDI is a composite index constructed from four individual indicators based on 2005: (i) the penetration index, (ii) the Depth index, (iii) an evolution index of the IPG (inverse index of the IPG as a market multiple), and (iv) an evolution index of the Life Insurance IPG (Index of the inverse of the Life Insurance IPG as a multiple of that market). For the purposes of this report, the indicator is also used as a comparison parameter when analyzing individual development trends in each of the region’s insurance markets.

10/ *7th report on the analysis and monitoring of supervised markets*. Private Insurance Superintendency, Strategic Management Assistance Coordinator.
11/ In the insurance industry, the production cycle is reversed and the pricing of product rates is based on an estimate of a cost to be incurred in the future rather than an incurred cost. In this case, the most important component of that future cost is loss experience, which (especially in non-life insurance) is strongly determined by the general price level of the economy. Thus, estimating penetration (premiums/GDP) is comparing the expected cost of the following year against the current year’s economy’s production flow, which, in high-inflation scenarios, can lead to overestimating the indicator.
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### Table A.1. Mexico: main insurance market magnitudes and indicators, 2008-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/ GDP)</th>
<th>Density (premiums per capita, pesos)</th>
<th>Depth index¹</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td>2008</td>
<td>1.7%</td>
<td>0.8%</td>
<td>0.9%</td>
<td>1.865</td>
<td>837</td>
</tr>
<tr>
<td>2009</td>
<td>1.9%</td>
<td>0.9%</td>
<td>1.1%</td>
<td>2.088</td>
<td>924</td>
</tr>
<tr>
<td>2010</td>
<td>1.8%</td>
<td>0.8%</td>
<td>1.0%</td>
<td>2.130</td>
<td>991</td>
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<tr>
<td>2011</td>
<td>1.9%</td>
<td>0.9%</td>
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<td>1,083</td>
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<td>1.9%</td>
<td>0.9%</td>
<td>1.0%</td>
<td>2.629</td>
<td>1,218</td>
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<tr>
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<td>1.0%</td>
<td>1.1%</td>
<td>2.873</td>
<td>1,339</td>
</tr>
<tr>
<td>2014</td>
<td>2.0%</td>
<td>1.0%</td>
<td>1.1%</td>
<td>2.970</td>
<td>1,406</td>
</tr>
<tr>
<td>2015</td>
<td>2.1%</td>
<td>1.0%</td>
<td>1.1%</td>
<td>3.210</td>
<td>1,493</td>
</tr>
<tr>
<td>2016</td>
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<td>1.2%</td>
<td>3.595</td>
<td>1,696</td>
</tr>
<tr>
<td>2017</td>
<td>2.2%</td>
<td>1.0%</td>
<td>1.2%</td>
<td>3.881</td>
<td>1,722</td>
</tr>
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<td>2018</td>
<td>2.2%</td>
<td>1.0%</td>
<td>1.2%</td>
<td>4.152</td>
<td>1,924</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the National Insurance and Bond Commission)

¹ Estimated with respect to net premiums earned; ² Return on equity; ³ Return on assets; ⁴ Life Insurance premiums/Total Premiums

---

**THE LATIN AMERICAN INSURANCE MARKET IN 2018**

**Fundación MAPFRE**

311
Table A.2. Guatemala: main insurance market magnitudes and indicators, 2008-2018 (million quetzals)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premises</th>
<th>Raw growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE</th>
<th>ROA</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Nominal</td>
<td>Real</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>3,249</td>
<td>602</td>
<td>2,647</td>
<td>9.5%</td>
<td>-1.7%</td>
<td>3,879</td>
<td>2,703</td>
<td>2,804</td>
<td>2,346</td>
<td>1,074</td>
<td>100.3</td>
<td>-8</td>
</tr>
<tr>
<td>2009</td>
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<td>667</td>
<td>2,876</td>
<td>9.1%</td>
<td>7.1%</td>
<td>4,279</td>
<td>3,054</td>
<td>2,968</td>
<td>2,552</td>
<td>1,311</td>
<td>100.9</td>
<td>-21</td>
</tr>
<tr>
<td>2010</td>
<td>3,805</td>
<td>745</td>
<td>3,060</td>
<td>7.4%</td>
<td>3.4%</td>
<td>4,665</td>
<td>3,276</td>
<td>3,254</td>
<td>3,005</td>
<td>1,410</td>
<td>98.1</td>
<td>48</td>
</tr>
<tr>
<td>2011</td>
<td>4,718</td>
<td>923</td>
<td>3,795</td>
<td>24.0%</td>
<td>16.8%</td>
<td>6,662</td>
<td>4,277</td>
<td>4,737</td>
<td>3,366</td>
<td>2,025</td>
<td>95.3</td>
<td>135</td>
</tr>
<tr>
<td>2012</td>
<td>4,466</td>
<td>952</td>
<td>3,644</td>
<td>-1.5%</td>
<td>-5.1%</td>
<td>6,671</td>
<td>6,591</td>
<td>4,543</td>
<td>3,340</td>
<td>2,128</td>
<td>94.5</td>
<td>170</td>
</tr>
<tr>
<td>2013</td>
<td>5,219</td>
<td>1,057</td>
<td>4,162</td>
<td>12.3%</td>
<td>7.6%</td>
<td>7,359</td>
<td>5,041</td>
<td>4,916</td>
<td>3,398</td>
<td>2,443</td>
<td>91.2</td>
<td>293</td>
</tr>
<tr>
<td>2014</td>
<td>5,639</td>
<td>1,187</td>
<td>4,452</td>
<td>8.1%</td>
<td>4.9%</td>
<td>7,889</td>
<td>5,463</td>
<td>5,121</td>
<td>3,648</td>
<td>2,768</td>
<td>91.0</td>
<td>318</td>
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<tr>
<td>2015</td>
<td>5,966</td>
<td>1,174</td>
<td>4,790</td>
<td>5.8%</td>
<td>3.3%</td>
<td>8,686</td>
<td>5,640</td>
<td>5,619</td>
<td>3,993</td>
<td>3,047</td>
<td>93.3</td>
<td>256</td>
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<tr>
<td>2016</td>
<td>6,313</td>
<td>1,271</td>
<td>5,042</td>
<td>5.8%</td>
<td>1.3%</td>
<td>9,132</td>
<td>5,951</td>
<td>5,817</td>
<td>4,946</td>
<td>3,314</td>
<td>93.3</td>
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<tr>
<td>2017</td>
<td>6,802</td>
<td>1,418</td>
<td>5,534</td>
<td>7.7%</td>
<td>3.2%</td>
<td>9,973</td>
<td>6,382</td>
<td>6,380</td>
<td>4,775</td>
<td>3,593</td>
<td>92.1</td>
<td>357</td>
</tr>
<tr>
<td>2018</td>
<td>7,005</td>
<td>1,462</td>
<td>5,542</td>
<td>3.0%</td>
<td>-0.7%</td>
<td>10,637</td>
<td>7,213</td>
<td>6,754</td>
<td>4,864</td>
<td>3,883</td>
<td>88.2</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita, quetzals)</th>
<th>Depth index</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td>2008</td>
<td>1.1%</td>
<td>0.2%</td>
<td>0.9%</td>
<td>232</td>
<td>43</td>
</tr>
<tr>
<td>2009</td>
<td>1.2%</td>
<td>0.2%</td>
<td>0.9%</td>
<td>247</td>
<td>47</td>
</tr>
<tr>
<td>2010</td>
<td>1.1%</td>
<td>0.2%</td>
<td>0.9%</td>
<td>260</td>
<td>51</td>
</tr>
<tr>
<td>2011</td>
<td>1.3%</td>
<td>0.2%</td>
<td>1.0%</td>
<td>316</td>
<td>62</td>
</tr>
<tr>
<td>2012</td>
<td>1.2%</td>
<td>0.2%</td>
<td>0.9%</td>
<td>304</td>
<td>62</td>
</tr>
<tr>
<td>2013</td>
<td>1.2%</td>
<td>0.2%</td>
<td>1.0%</td>
<td>335</td>
<td>68</td>
</tr>
<tr>
<td>2014</td>
<td>1.2%</td>
<td>0.3%</td>
<td>1.0%</td>
<td>354</td>
<td>75</td>
</tr>
<tr>
<td>2015</td>
<td>1.2%</td>
<td>0.2%</td>
<td>1.0%</td>
<td>367</td>
<td>72</td>
</tr>
<tr>
<td>2016</td>
<td>1.2%</td>
<td>0.2%</td>
<td>1.0%</td>
<td>381</td>
<td>77</td>
</tr>
<tr>
<td>2017</td>
<td>1.2%</td>
<td>0.3%</td>
<td>1.0%</td>
<td>402</td>
<td>84</td>
</tr>
<tr>
<td>2018</td>
<td>1.2%</td>
<td>0.2%</td>
<td>0.9%</td>
<td>406</td>
<td>85</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Banking Superintendence)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life insurance premiums/Total premiums

THE LATIN AMERICAN INSURANCE MARKET IN 2018
<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/ GDP)</th>
<th>Density (premiums per capita, lempiras)</th>
<th>Depth index</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td>2008</td>
<td>2.0%</td>
<td>0.5%</td>
<td>1.5%</td>
<td>670</td>
<td>172</td>
</tr>
<tr>
<td>2009</td>
<td>1.9%</td>
<td>0.5%</td>
<td>1.4%</td>
<td>684</td>
<td>181</td>
</tr>
<tr>
<td>2010</td>
<td>1.9%</td>
<td>0.5%</td>
<td>1.4%</td>
<td>712</td>
<td>184</td>
</tr>
<tr>
<td>2011</td>
<td>1.9%</td>
<td>0.5%</td>
<td>1.3%</td>
<td>725</td>
<td>212</td>
</tr>
<tr>
<td>2012</td>
<td>1.9%</td>
<td>0.6%</td>
<td>1.3%</td>
<td>799</td>
<td>234</td>
</tr>
<tr>
<td>2013</td>
<td>2.0%</td>
<td>0.6%</td>
<td>1.4%</td>
<td>852</td>
<td>263</td>
</tr>
<tr>
<td>2014</td>
<td>1.9%</td>
<td>0.6%</td>
<td>1.3%</td>
<td>889</td>
<td>270</td>
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<tr>
<td>2015</td>
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<td>0.6%</td>
<td>1.3%</td>
<td>958</td>
<td>306</td>
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<tr>
<td>2016</td>
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<td>0.7%</td>
<td>1.3%</td>
<td>1034</td>
<td>355</td>
</tr>
<tr>
<td>2017</td>
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<td>0.6%</td>
<td>1.3%</td>
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<td>2018</td>
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<td>0.6%</td>
<td>1.3%</td>
<td>1,164</td>
<td>378</td>
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</table>

Source: MAPFRE Economic Research (with data from the National Banking and Insurance Commission)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life insurance premiums/Total Premiums
### Table A.4. El Salvador: main insurance market magnitudes and indicators, 2008-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita, USD)</th>
<th>Depth index</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td>2008</td>
<td>2.4%</td>
<td>0.8%</td>
<td>1.6%</td>
<td>72</td>
<td>24</td>
</tr>
<tr>
<td>2009</td>
<td>2.5%</td>
<td>0.9%</td>
<td>1.6%</td>
<td>72</td>
<td>25</td>
</tr>
<tr>
<td>2010</td>
<td>2.5%</td>
<td>0.9%</td>
<td>1.6%</td>
<td>73</td>
<td>26</td>
</tr>
<tr>
<td>2011</td>
<td>2.4%</td>
<td>0.8%</td>
<td>1.5%</td>
<td>77</td>
<td>28</td>
</tr>
<tr>
<td>2012</td>
<td>2.4%</td>
<td>0.9%</td>
<td>1.5%</td>
<td>81</td>
<td>30</td>
</tr>
<tr>
<td>2013</td>
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<td>1.0%</td>
<td>1.5%</td>
<td>87</td>
<td>33</td>
</tr>
<tr>
<td>2014</td>
<td>2.5%</td>
<td>1.0%</td>
<td>1.5%</td>
<td>91</td>
<td>36</td>
</tr>
<tr>
<td>2015</td>
<td>2.6%</td>
<td>1.0%</td>
<td>1.6%</td>
<td>96</td>
<td>37</td>
</tr>
<tr>
<td>2016</td>
<td>2.6%</td>
<td>0.9%</td>
<td>1.7%</td>
<td>98</td>
<td>34</td>
</tr>
<tr>
<td>2017</td>
<td>2.5%</td>
<td>0.9%</td>
<td>1.6%</td>
<td>96</td>
<td>34</td>
</tr>
<tr>
<td>2018</td>
<td>2.5%</td>
<td>0.8%</td>
<td>1.7%</td>
<td>102</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Financial System Superintendency)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life Insurance premiums/Total Premiums
Table A.5. Nicaragua: main insurance market magnitudes and indicators, 2008-2018
(millions of cordobas)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Life</th>
<th>Non-Life</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>2,090</td>
<td>340</td>
<td>1,750</td>
<td>1.4%</td>
<td>-4.9%</td>
<td>2,860</td>
<td>1,894</td>
<td>2,254</td>
<td>1.639</td>
<td>606</td>
<td>94.4</td>
<td>69</td>
<td>127</td>
<td>25.0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>2009</td>
<td>2,255</td>
<td>359</td>
<td>1,897</td>
<td>7.9%</td>
<td>4.1%</td>
<td>3,272</td>
<td>2,170</td>
<td>2,458</td>
<td>1.823</td>
<td>814</td>
<td>91.9</td>
<td>110</td>
<td>150</td>
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<td>7.7%</td>
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<td>2,530</td>
<td>2,646</td>
<td>1.949</td>
<td>1,021</td>
<td>94.5</td>
<td>82</td>
<td>180</td>
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<td>7.4%</td>
</tr>
<tr>
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<td>2,765</td>
<td>418</td>
<td>2,347</td>
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<td>4,193</td>
<td>3,003</td>
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<td>2,217</td>
<td>1,264</td>
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<td>514</td>
<td>2,741</td>
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<td>94.4</td>
<td>103</td>
<td>164</td>
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<td>5.2%</td>
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<tr>
<td>2013</td>
<td>3,878</td>
<td>668</td>
<td>3,210</td>
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<td>5,793</td>
<td>4,096</td>
<td>4,190</td>
<td>2,997</td>
<td>1,603</td>
<td>89.6</td>
<td>236</td>
<td>178</td>
<td>22.3%</td>
<td>6.2%</td>
</tr>
<tr>
<td>2014</td>
<td>4,615</td>
<td>823</td>
<td>3,792</td>
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<td>4,788</td>
<td>4,820</td>
<td>3,450</td>
<td>1,975</td>
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<td>350</td>
<td>213</td>
<td>22.8%</td>
<td>6.6%</td>
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<tr>
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<td>5,198</td>
<td>916</td>
<td>4,282</td>
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<td>7,857</td>
<td>5,533</td>
<td>5,521</td>
<td>3,916</td>
<td>2,336</td>
<td>86.6</td>
<td>431</td>
<td>249</td>
<td>23.6%</td>
<td>7.0%</td>
</tr>
<tr>
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<td>5,848</td>
<td>1,111</td>
<td>4,737</td>
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<td>8.7%</td>
<td>9,268</td>
<td>6,493</td>
<td>6,529</td>
<td>4,709</td>
<td>2,738</td>
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<td>403</td>
<td>347</td>
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<td>6.3%</td>
</tr>
<tr>
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<td>1,295</td>
<td>5,324</td>
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<td>9.0%</td>
<td>11,132</td>
<td>7,597</td>
<td>7,684</td>
<td>5,571</td>
<td>3,448</td>
<td>82.8</td>
<td>718</td>
<td>431</td>
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<td>8.5%</td>
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<tr>
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<td>7,066</td>
<td>1,451</td>
<td>5,615</td>
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<td>1.7%</td>
<td>12,012</td>
<td>8,356</td>
<td>7,648</td>
<td>5,080</td>
<td>4,364</td>
<td>84.3</td>
<td>753</td>
<td>446</td>
<td>24.0%</td>
<td>8.7%</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration [premiums/GDP]</th>
<th>Density [premiums per capita, cordobas]</th>
<th>Depth index</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
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</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.3% 0.2% 1.1%</td>
<td>369 60 309</td>
<td>16.3%</td>
<td>11,276 7,556 3,721</td>
<td>5.4 22.2 2.1</td>
</tr>
<tr>
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<td>393 62 330</td>
<td>15.9%</td>
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<td>5.2 22.1 2.1</td>
</tr>
<tr>
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<td>12,875 8,671 4,204</td>
<td>5.2 23.6 2.0</td>
</tr>
<tr>
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<td>468 71 398</td>
<td>15.1%</td>
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<td>5.5 24.0 2.2</td>
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<tr>
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<td>15.8%</td>
<td>17,099 11,427 5,672</td>
<td>5.3 22.2 2.1</td>
</tr>
<tr>
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<td>4.5 17.3 1.9</td>
</tr>
<tr>
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<td>751 134 617</td>
<td>17.8%</td>
<td>19,969 13,352 6,617</td>
<td>4.3 16.2 1.7</td>
</tr>
<tr>
<td>2015</td>
<td>1.5% 0.3% 1.2%</td>
<td>835 147 688</td>
<td>17.6%</td>
<td>22,461 14,991 7,470</td>
<td>4.3 16.4 1.7</td>
</tr>
<tr>
<td>2016</td>
<td>1.5% 0.3% 1.3%</td>
<td>928 176 751</td>
<td>19.0%</td>
<td>23,446 15,256 8,192</td>
<td>4.0 13.7 1.7</td>
</tr>
<tr>
<td>2017</td>
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<td>19.6%</td>
<td>25,074 16,363 8,711</td>
<td>3.8 12.6 1.6</td>
</tr>
<tr>
<td>2018</td>
<td>1.7% 0.3% 1.3%</td>
<td>1,093 224 868</td>
<td>20.5%</td>
<td>25,997 16,465 8,632</td>
<td>3.6 11.3 1.5</td>
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Source: MAPFRE Economic Research (with data from the Banking Superintendency and other financial institutions)

* Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life Insurance premiums/Total Premiums
<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE</th>
<th>ROA</th>
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<td>12,817</td>
<td>323,548</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
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<td>32,879</td>
<td>320,944</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>4,378</td>
<td>61,717</td>
<td>9.2</td>
</tr>
<tr>
<td>2010</td>
<td>353,823</td>
<td>32,879</td>
<td>320,944</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>4,378</td>
<td>61,717</td>
<td>9.2</td>
</tr>
<tr>
<td>2011</td>
<td>401,191</td>
<td>42,428</td>
<td>358,762</td>
<td>1.3%</td>
<td>1,021,248</td>
<td>806,356</td>
<td>602,105</td>
<td>536,421</td>
<td>10.4</td>
<td>-17,020</td>
<td>70,042</td>
<td>10.2</td>
</tr>
<tr>
<td>2012</td>
<td>466,156</td>
<td>55,542</td>
<td>410,614</td>
<td>11.2%</td>
<td>1,121,715</td>
<td>897,800</td>
<td>670,748</td>
<td>586,644</td>
<td>10.4</td>
<td>-14,203</td>
<td>83,428</td>
<td>8.4</td>
</tr>
<tr>
<td>2013</td>
<td>517,980</td>
<td>69,625</td>
<td>448,355</td>
<td>5.6%</td>
<td>1,564,957</td>
<td>1,259,540</td>
<td>956,010</td>
<td>678,847</td>
<td>11.2</td>
<td>-45,863</td>
<td>80,619</td>
<td>6.0</td>
</tr>
<tr>
<td>2014</td>
<td>622,592</td>
<td>76,621</td>
<td>545,972</td>
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<td>1,851,783</td>
<td>1,350,444</td>
<td>1,114,450</td>
<td>737,333</td>
<td>11.0</td>
<td>-44,132</td>
<td>100,903</td>
<td>6.3</td>
</tr>
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<td>72,182</td>
<td>491,838</td>
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<td>1,495,158</td>
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<td>801,335</td>
<td>11.1</td>
<td>-50,555</td>
<td>97,502</td>
<td>6.8</td>
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<td>101,881</td>
<td>552,835</td>
<td>16.1%</td>
<td>2,128,211</td>
<td>1,542,933</td>
<td>1,273,229</td>
<td>854,982</td>
<td>10.5</td>
<td>-27,856</td>
<td>90,305</td>
<td>6.4</td>
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<td>111,184</td>
<td>638,156</td>
<td>14.9%</td>
<td>2,263,997</td>
<td>1,646,678</td>
<td>1,320,973</td>
<td>943,024</td>
<td>9.9</td>
<td>2,815</td>
<td>97,525</td>
<td>7.5</td>
</tr>
<tr>
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<td>123,926</td>
<td>647,976</td>
<td>3.0%</td>
<td>2,402,493</td>
<td>1,756,528</td>
<td>1,389,075</td>
<td>875,442</td>
<td>10.3</td>
<td>-23,743</td>
<td>121,554</td>
<td>7.1</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita, colones)</th>
<th>Depth index</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
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<td>2.1%</td>
<td>0.1%</td>
<td>2.0%</td>
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<td>2,672</td>
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<tr>
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<td>0.2%</td>
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<td>78,627</td>
<td>7,273</td>
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<tr>
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<td>0.2%</td>
<td>1.8%</td>
<td>82,525</td>
<td>7,261</td>
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<tr>
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<td>0.2%</td>
<td>1.7%</td>
<td>86,593</td>
<td>9,158</td>
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<tr>
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<td>0.2%</td>
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<td>11,848</td>
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<td>0.3%</td>
<td>1.8%</td>
<td>109,230</td>
<td>14,682</td>
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<td>0.3%</td>
<td>2.0%</td>
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<td>15,978</td>
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<td>0.2%</td>
<td>1.7%</td>
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<td>2016</td>
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<td>0.3%</td>
<td>1.8%</td>
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<td>20,795</td>
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<tr>
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<td>0.4%</td>
<td>1.9%</td>
<td>154,398</td>
<td>24,788</td>
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</table>

Source: MAPFRE Economic Research (with data from the General Insurance Superintendency)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life premiums/Total Premiums
<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Life</th>
<th>Non-Life</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita, balboas)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td>2008</td>
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<td>0.9%</td>
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<td>847</td>
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<td>73</td>
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<td>2.1%</td>
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<td>2.1%</td>
</tr>
<tr>
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<td>990</td>
<td>907</td>
<td>83</td>
<td>3.4%</td>
<td>2.1%</td>
</tr>
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<td>2.1%</td>
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<td>2.1%</td>
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<td>1,427</td>
<td>45</td>
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<td>2.1%</td>
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</table>

Table A.7. Panama: main insurance market magnitudes and indicators, 2008-2018

(millions of balboas)

Source: MAPFRE Economic Research (with data from the General Insurance and Reinsurance Superintendency)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life Insurance premiums /Total Premiums
Table A.8. Dominican Republic: main insurance market magnitudes and indicators, 2008-2018

(million pesos)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita)</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td></td>
<td>Premiums</td>
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<td>11.1%</td>
<td>0.7%</td>
<td>11.8%</td>
</tr>
<tr>
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<td>Real</td>
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<td>10.349</td>
<td>15.238</td>
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</tr>
<tr>
<td></td>
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<td>8.687</td>
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<td>9.6.1</td>
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<tr>
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<td>0.4%</td>
</tr>
<tr>
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<td>0.1%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
<td>0.1%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>0.1%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
<td>0.3%</td>
<td>1.1%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
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<td>Real</td>
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<td>1.2%</td>
<td>1.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
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<td>1.1%</td>
<td>1.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
<td>0.2%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>0.2%</td>
</tr>
<tr>
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<td>Real</td>
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<td>0.9%</td>
<td>0.9%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
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<td>0.8%</td>
<td>0.8%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
<td>0.2%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
<td>0.2%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
<td>0.2%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.2%</td>
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<tr>
<td></td>
<td>Real</td>
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<td>0.4%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
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<td>0.3%</td>
<td>0.3%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>Real</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
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</tr>
<tr>
<td></td>
<td>Real</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with Insurance Superintendency data)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life Insurance premiums/Total Premiums.
### Table A.9. Puerto Rico: main insurance market magnitudes and indicators, 2008-2018 (millions of USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Premiums</th>
<th>Life Premiums</th>
<th>Non-Life Premiums</th>
<th>Premium growth Nominal</th>
<th>Premium growth Real</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio1</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE2</th>
<th>ROA3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>9,277</td>
<td>716</td>
<td>8,582</td>
<td>0.5%</td>
<td>-4.5%</td>
<td>6,440</td>
<td>n/a</td>
<td>4,357</td>
<td>n/a</td>
<td>2,103</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>14.0%</td>
<td>4.6%</td>
</tr>
<tr>
<td>2009</td>
<td>9,805</td>
<td>706</td>
<td>9,099</td>
<td>5.5%</td>
<td>5.2%</td>
<td>6,912</td>
<td>n/a</td>
<td>4,533</td>
<td>n/a</td>
<td>2,378</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>16.5%</td>
<td>5.7%</td>
</tr>
<tr>
<td>2010</td>
<td>10,428</td>
<td>801</td>
<td>9,626</td>
<td>6.4%</td>
<td>3.8%</td>
<td>7,135</td>
<td>5,752</td>
<td>4,732</td>
<td>3,275</td>
<td>2,403</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>16.3%</td>
<td>5.5%</td>
</tr>
<tr>
<td>2011</td>
<td>11,059</td>
<td>898</td>
<td>10,161</td>
<td>6.1%</td>
<td>3.1%</td>
<td>7,143</td>
<td>5,824</td>
<td>4,691</td>
<td>3,238</td>
<td>2,452</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>15.0%</td>
<td>5.1%</td>
</tr>
<tr>
<td>2012</td>
<td>10,577</td>
<td>980</td>
<td>9,597</td>
<td>-4.4%</td>
<td>-5.6%</td>
<td>7,477</td>
<td>6,136</td>
<td>4,805</td>
<td>3,321</td>
<td>2,643</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>12.8%</td>
<td>4.5%</td>
</tr>
<tr>
<td>2013</td>
<td>10,518</td>
<td>1,053</td>
<td>9,465</td>
<td>-0.6%</td>
<td>-1.6%</td>
<td>7,463</td>
<td>6,091</td>
<td>4,906</td>
<td>3,278</td>
<td>2,557</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>12.0%</td>
<td>4.1%</td>
</tr>
<tr>
<td>2014</td>
<td>9,997</td>
<td>1,237</td>
<td>8,730</td>
<td>-5.2%</td>
<td>-5.8%</td>
<td>7,437</td>
<td>5,841</td>
<td>4,994</td>
<td>3,127</td>
<td>2,443</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>4.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>2015</td>
<td>12,113</td>
<td>1,252</td>
<td>10,861</td>
<td>21.5%</td>
<td>22.5%</td>
<td>8,106</td>
<td>6,122</td>
<td>5,549</td>
<td>3,452</td>
<td>2,557</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>4.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>2016</td>
<td>12,869</td>
<td>1,265</td>
<td>11,605</td>
<td>6.2%</td>
<td>6.6%</td>
<td>8,241</td>
<td>6,294</td>
<td>5,749</td>
<td>3,400</td>
<td>2,492</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>6.8%</td>
<td>2.1%</td>
</tr>
<tr>
<td>2017</td>
<td>12,778</td>
<td>1,153</td>
<td>11,625</td>
<td>-0.7%</td>
<td>-2.4%</td>
<td>9,439</td>
<td>7,249</td>
<td>6,819</td>
<td>3,680</td>
<td>2,620</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>12.9%</td>
<td>3.6%</td>
</tr>
<tr>
<td>2018</td>
<td>13,939</td>
<td>1,356</td>
<td>12,583</td>
<td>9.1%</td>
<td>6.4%</td>
<td>9,607</td>
<td>7,045</td>
<td>9,098</td>
<td>8,582</td>
<td>7,045</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>5.4%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration [premiums/GDP]</th>
<th>Density [premiums per capita]</th>
<th>Depth index1</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td>2008</td>
<td>9.9%</td>
<td>0.8%</td>
<td>9.2%</td>
<td>2,577</td>
<td>198</td>
</tr>
<tr>
<td>2009</td>
<td>10.2%</td>
<td>0.7%</td>
<td>9.4%</td>
<td>2,726</td>
<td>196</td>
</tr>
<tr>
<td>2010</td>
<td>10.6%</td>
<td>0.8%</td>
<td>9.8%</td>
<td>2,913</td>
<td>224</td>
</tr>
<tr>
<td>2011</td>
<td>11.0%</td>
<td>0.9%</td>
<td>10.1%</td>
<td>3,107</td>
<td>252</td>
</tr>
<tr>
<td>2012</td>
<td>10.4%</td>
<td>1.0%</td>
<td>9.4%</td>
<td>2,991</td>
<td>277</td>
</tr>
<tr>
<td>2013</td>
<td>10.3%</td>
<td>1.0%</td>
<td>9.2%</td>
<td>3,002</td>
<td>301</td>
</tr>
<tr>
<td>2014</td>
<td>9.7%</td>
<td>1.2%</td>
<td>8.5%</td>
<td>2,886</td>
<td>358</td>
</tr>
<tr>
<td>2015</td>
<td>11.7%</td>
<td>1.2%</td>
<td>10.5%</td>
<td>3,582</td>
<td>370</td>
</tr>
<tr>
<td>2016</td>
<td>12.4%</td>
<td>1.2%</td>
<td>11.2%</td>
<td>3,920</td>
<td>385</td>
</tr>
<tr>
<td>2017</td>
<td>12.3%</td>
<td>1.1%</td>
<td>11.2%</td>
<td>4,039</td>
<td>364</td>
</tr>
<tr>
<td>2018</td>
<td>13.4%</td>
<td>1.3%</td>
<td>12.1%</td>
<td>4,586</td>
<td>446</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Puerto Rico Insurance Commissioner’s Office)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life Insurance premiums/Total Premiums
### Table A.10. Colombia: main insurance market magnitudes and indicators, 2008-2018 (million pesos)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Life</th>
<th>Non-Life</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>10,470,809</td>
<td>3,515,479</td>
<td>6,955,330</td>
<td>22.8%</td>
<td>14.8%</td>
<td>23,378,291</td>
<td>17,833,992</td>
<td>18,089,952</td>
<td>15,206,359</td>
<td>5,288,338</td>
<td>109.0</td>
<td>-636,820</td>
<td>1,415,345</td>
<td>13.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td>2009</td>
<td>11,436,694</td>
<td>3,535,050</td>
<td>7,901,643</td>
<td>9.2%</td>
<td>4.8%</td>
<td>27,176,830</td>
<td>21,178,434</td>
<td>20,506,159</td>
<td>17,479,795</td>
<td>6,670,671</td>
<td>113.5</td>
<td>-1,080,246</td>
<td>2,442,565</td>
<td>18.1%</td>
<td>4.5%</td>
</tr>
<tr>
<td>2010</td>
<td>11,849,969</td>
<td>3,344,106</td>
<td>8,505,863</td>
<td>3.6%</td>
<td>1.3%</td>
<td>30,723,343</td>
<td>23,910,276</td>
<td>22,887,250</td>
<td>19,540,989</td>
<td>7,836,093</td>
<td>110.4</td>
<td>-889,033</td>
<td>2,131,454</td>
<td>15.4%</td>
<td>3.9%</td>
</tr>
<tr>
<td>2011</td>
<td>13,581,536</td>
<td>3,819,524</td>
<td>9,762,029</td>
<td>14.6%</td>
<td>10.8%</td>
<td>34,160,398</td>
<td>26,072,658</td>
<td>26,131,156</td>
<td>22,356,789</td>
<td>8,029,244</td>
<td>109.2</td>
<td>-890,427</td>
<td>1,495,277</td>
<td>7.7%</td>
<td>1.8%</td>
</tr>
<tr>
<td>2012</td>
<td>15,964,766</td>
<td>4,764,043</td>
<td>11,200,722</td>
<td>17.5%</td>
<td>13.9%</td>
<td>38,685,408</td>
<td>29,378,084</td>
<td>29,305,428</td>
<td>25,326,006</td>
<td>9,179,981</td>
<td>110.6</td>
<td>-1,216,912</td>
<td>2,405,145</td>
<td>12.1%</td>
<td>2.9%</td>
</tr>
<tr>
<td>2013</td>
<td>18,833,416</td>
<td>6,690,847</td>
<td>12,142,569</td>
<td>18.0%</td>
<td>15.6%</td>
<td>42,857,016</td>
<td>33,375,423</td>
<td>33,746,620</td>
<td>29,208,392</td>
<td>9,110,396</td>
<td>108.6</td>
<td>-1,129,101</td>
<td>1,822,198</td>
<td>6.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>2014</td>
<td>19,036,166</td>
<td>5,656,006</td>
<td>13,380,160</td>
<td>1.1%</td>
<td>-1.8%</td>
<td>47,590,990</td>
<td>37,197,033</td>
<td>37,599,677</td>
<td>32,297,179</td>
<td>9,991,312</td>
<td>110.4</td>
<td>-1,523,216</td>
<td>2,747,916</td>
<td>10.9%</td>
<td>2.3%</td>
</tr>
<tr>
<td>2015</td>
<td>21,508,936</td>
<td>6,313,957</td>
<td>15,194,979</td>
<td>13.0%</td>
<td>7.6%</td>
<td>51,585,889</td>
<td>38,983,764</td>
<td>41,720,926</td>
<td>35,211,300</td>
<td>9,864,962</td>
<td>110.8</td>
<td>-1,718,318</td>
<td>2,928,678</td>
<td>10.8%</td>
<td>2.1%</td>
</tr>
<tr>
<td>2016</td>
<td>23,849,424</td>
<td>7,461,856</td>
<td>16,387,568</td>
<td>10.9%</td>
<td>3.1%</td>
<td>58,252,927</td>
<td>44,323,525</td>
<td>47,104,482</td>
<td>41,262,658</td>
<td>11,148,445</td>
<td>111.8</td>
<td>-2,251,876</td>
<td>2,126,952</td>
<td>14.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>2017</td>
<td>26,003,162</td>
<td>8,436,839</td>
<td>17,566,323</td>
<td>9.0%</td>
<td>4.5%</td>
<td>66,222,514</td>
<td>50,288,473</td>
<td>53,805,647</td>
<td>47,177,339</td>
<td>12,416,867</td>
<td>111.3</td>
<td>-2,104,869</td>
<td>1,878,021</td>
<td>14.5%</td>
<td>2.7%</td>
</tr>
<tr>
<td>2018</td>
<td>27,268,333</td>
<td>8,540,789</td>
<td>18,727,544</td>
<td>4.9%</td>
<td>1.6%</td>
<td>76,735,130</td>
<td>55,415,603</td>
<td>63,446,833</td>
<td>56,464,952</td>
<td>13,270,296</td>
<td>108.9</td>
<td>-1,763,815</td>
<td>1,626,163</td>
<td>12.7%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

### Notes

1. Estimated with respect to net premiums earned; 2. Return on equity; 3. Return on assets; 4. Life insurance premiums/Total Premiums

Source: MAPFRE Economic Research (with data from the Colombian Financial Superintendency)
### Table A.11. Venezuela: main insurance market magnitudes and indicators, 2008-2018

(million sovereign bolivares)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Nominal</td>
<td>Real</td>
<td>0.179</td>
<td>0.146</td>
<td>0.114</td>
<td>0.088</td>
<td>0.064</td>
<td>98.6</td>
<td>0.002</td>
</tr>
<tr>
<td>2008</td>
<td>0.223</td>
<td>0.006</td>
<td>0.218</td>
<td>45.0%</td>
<td>10.3%</td>
<td>0.219</td>
<td>0.174</td>
<td>0.139</td>
<td>0.106</td>
<td>0.081</td>
<td>100.1</td>
<td>-0.000</td>
</tr>
<tr>
<td>2009</td>
<td>0.276</td>
<td>0.007</td>
<td>0.269</td>
<td>23.4%</td>
<td>-4.1%</td>
<td>0.331</td>
<td>0.258</td>
<td>0.210</td>
<td>0.144</td>
<td>0.121</td>
<td>98.0</td>
<td>0.006</td>
</tr>
<tr>
<td>2010</td>
<td>0.369</td>
<td>0.009</td>
<td>0.360</td>
<td>34.0%</td>
<td>3.8%</td>
<td>0.426</td>
<td>0.338</td>
<td>0.278</td>
<td>0.186</td>
<td>0.147</td>
<td>97.1</td>
<td>0.010</td>
</tr>
<tr>
<td>2011</td>
<td>0.645</td>
<td>0.009</td>
<td>0.656</td>
<td>25.9%</td>
<td>-1.0%</td>
<td>0.520</td>
<td>0.411</td>
<td>0.338</td>
<td>0.231</td>
<td>0.182</td>
<td>97.5</td>
<td>0.011</td>
</tr>
<tr>
<td>2012</td>
<td>0.597</td>
<td>0.011</td>
<td>0.586</td>
<td>28.4%</td>
<td>6.1%</td>
<td>0.801</td>
<td>0.649</td>
<td>0.480</td>
<td>0.331</td>
<td>0.321</td>
<td>99.4</td>
<td>0.004</td>
</tr>
<tr>
<td>2013</td>
<td>0.856</td>
<td>0.016</td>
<td>0.841</td>
<td>43.4%</td>
<td>3.6%</td>
<td>1.575</td>
<td>1.312</td>
<td>0.818</td>
<td>0.572</td>
<td>0.756</td>
<td>101.1</td>
<td>-0.010</td>
</tr>
<tr>
<td>2014</td>
<td>1.424</td>
<td>0.023</td>
<td>1.401</td>
<td>66.3%</td>
<td>5.7%</td>
<td>5.839</td>
<td>4.784</td>
<td>2.119</td>
<td>1.326</td>
<td>3.720</td>
<td>105.3</td>
<td>-0.103</td>
</tr>
<tr>
<td>2015</td>
<td>3.300</td>
<td>0.041</td>
<td>3.259</td>
<td>131.7%</td>
<td>9.6%</td>
<td>8.614</td>
<td>7.160</td>
<td>3.044</td>
<td>3.036</td>
<td>11.66</td>
<td>107.9</td>
<td>-0.396</td>
</tr>
<tr>
<td>2016</td>
<td>8.715</td>
<td>0.101</td>
<td>8.614</td>
<td>161.6%</td>
<td>25.5%</td>
<td>20.182</td>
<td>18.608</td>
<td>6.304</td>
<td>3.036</td>
<td>11.66</td>
<td>107.9</td>
<td>-0.396</td>
</tr>
<tr>
<td>2017</td>
<td>38.201</td>
<td>0.384</td>
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<td>26.2%</td>
<td>29.109</td>
<td>14.156</td>
<td>29.109</td>
<td>3.036</td>
<td>11.66</td>
<td>107.9</td>
<td>-0.396</td>
</tr>
<tr>
<td>2018</td>
<td>26591.123</td>
<td>279.036</td>
<td>26312.087</td>
<td>69508.2%</td>
<td>92.5%</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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<table>
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<tr>
<th>Year</th>
<th>Penetration [premiums/GDP]</th>
<th>Density [premiums per capita, bolivares]</th>
<th>Depth index</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
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<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
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<td>3.1%</td>
<td>0.008</td>
<td>0.000</td>
</tr>
<tr>
<td>2009</td>
<td>3.9%</td>
<td>0.1%</td>
<td>3.8%</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>2010</td>
<td>3.7%</td>
<td>0.1%</td>
<td>3.6%</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>2011</td>
<td>3.3%</td>
<td>0.1%</td>
<td>3.3%</td>
<td>0.016</td>
<td>0.000</td>
</tr>
<tr>
<td>2012</td>
<td>3.7%</td>
<td>0.1%</td>
<td>3.7%</td>
<td>0.020</td>
<td>0.000</td>
</tr>
<tr>
<td>2013</td>
<td>3.9%</td>
<td>0.1%</td>
<td>3.8%</td>
<td>0.029</td>
<td>0.001</td>
</tr>
<tr>
<td>2014</td>
<td>4.7%</td>
<td>0.1%</td>
<td>4.7%</td>
<td>0.047</td>
<td>0.001</td>
</tr>
<tr>
<td>2015</td>
<td>4.1%</td>
<td>0.1%</td>
<td>4.1%</td>
<td>0.110</td>
<td>0.001</td>
</tr>
<tr>
<td>2016</td>
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<td>3.1%</td>
<td>0.292</td>
<td>0.003</td>
</tr>
<tr>
<td>2017</td>
<td>1.9%</td>
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<td>1.299</td>
<td>0.013</td>
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<tr>
<td>2018</td>
<td>0.4%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>920.518</td>
<td>9.660</td>
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</table>

Source: MAPFRE Economic Research (with data from the Insurance Activity Superintendency)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life Insurance premiums/Total Premiums
### Table A.12. Brazil: main insurance market magnitudes and indicators, 2008-2018 (million reais)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio (^1)</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE (^2)</th>
<th>ROA (^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>478,16</td>
<td>33,410</td>
<td>34,407</td>
<td>230,574</td>
<td>201,481</td>
<td>189,204</td>
<td>171,331</td>
<td>41,370</td>
<td>96.7</td>
<td>1,173</td>
<td>5,080</td>
<td>21.4%</td>
</tr>
<tr>
<td>2009</td>
<td>76,611</td>
<td>41,368</td>
<td>35,243</td>
<td>291,557</td>
<td>249,732</td>
<td>236,625</td>
<td>217,379</td>
<td>54,932</td>
<td>94.6</td>
<td>2,171</td>
<td>5,854</td>
<td>17.7%</td>
</tr>
<tr>
<td>2010</td>
<td>90,891</td>
<td>49,616</td>
<td>40,473</td>
<td>345,903</td>
<td>300,020</td>
<td>283,074</td>
<td>262,680</td>
<td>62,829</td>
<td>94.7</td>
<td>2,413</td>
<td>6,366</td>
<td>18.1%</td>
</tr>
<tr>
<td>2011</td>
<td>105,001</td>
<td>58,511</td>
<td>46,490</td>
<td>409,926</td>
<td>356,677</td>
<td>344,088</td>
<td>317,909</td>
<td>65,838</td>
<td>97.3</td>
<td>1,465</td>
<td>13,278</td>
<td>19.1%</td>
</tr>
<tr>
<td>2012</td>
<td>129,601</td>
<td>77,147</td>
<td>52,255</td>
<td>495,599</td>
<td>433,224</td>
<td>424,253</td>
<td>391,713</td>
<td>75,346</td>
<td>96.3</td>
<td>2,210</td>
<td>14,177</td>
<td>18.0%</td>
</tr>
<tr>
<td>2013</td>
<td>145,184</td>
<td>83,357</td>
<td>61,828</td>
<td>547,428</td>
<td>470,528</td>
<td>475,329</td>
<td>443,146</td>
<td>72,098</td>
<td>92.8</td>
<td>4,985</td>
<td>11,888</td>
<td>21.8%</td>
</tr>
<tr>
<td>2014</td>
<td>165,235</td>
<td>94,153</td>
<td>71,082</td>
<td>637,696</td>
<td>549,907</td>
<td>562,118</td>
<td>520,982</td>
<td>75,579</td>
<td>95.2</td>
<td>3,630</td>
<td>16,682</td>
<td>23.4%</td>
</tr>
<tr>
<td>2015</td>
<td>184,201</td>
<td>111,024</td>
<td>73,177</td>
<td>740,603</td>
<td>643,058</td>
<td>668,983</td>
<td>626,924</td>
<td>71,620</td>
<td>95.2</td>
<td>3,941</td>
<td>19,422</td>
<td>27.7%</td>
</tr>
<tr>
<td>2016</td>
<td>205,480</td>
<td>130,722</td>
<td>74,757</td>
<td>873,463</td>
<td>776,339</td>
<td>792,216</td>
<td>755,915</td>
<td>81,247</td>
<td>95.3</td>
<td>4,074</td>
<td>18,932</td>
<td>22.0%</td>
</tr>
<tr>
<td>2017</td>
<td>212,155</td>
<td>135,709</td>
<td>76,446</td>
<td>1,005,977</td>
<td>934,291</td>
<td>917,710</td>
<td>876,797</td>
<td>87,248</td>
<td>93.7</td>
<td>5,574</td>
<td>16,611</td>
<td>19.8%</td>
</tr>
<tr>
<td>2018</td>
<td>210,319</td>
<td>129,975</td>
<td>80,344</td>
<td>1,095,005</td>
<td>985,310</td>
<td>1,010,482</td>
<td>965,974</td>
<td>84,523</td>
<td>91.8</td>
<td>7,744</td>
<td>15,989</td>
<td>22.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita, reais)</th>
<th>Depth index (^4)</th>
<th>The Insurance Protection Gap IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
</tr>
<tr>
<td>2008</td>
<td>2.2%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>353</td>
</tr>
<tr>
<td>2009</td>
<td>2.3%</td>
<td>1.2%</td>
<td>1.1%</td>
<td>395</td>
</tr>
<tr>
<td>2010</td>
<td>2.3%</td>
<td>1.3%</td>
<td>1.0%</td>
<td>460</td>
</tr>
<tr>
<td>2011</td>
<td>2.6%</td>
<td>1.3%</td>
<td>1.1%</td>
<td>532</td>
</tr>
<tr>
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<td>1.6%</td>
<td>1.1%</td>
<td>649</td>
</tr>
<tr>
<td>2013</td>
<td>2.7%</td>
<td>1.6%</td>
<td>1.2%</td>
<td>722</td>
</tr>
<tr>
<td>2014</td>
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<td>1.6%</td>
<td>1.2%</td>
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</tr>
<tr>
<td>2015</td>
<td>3.1%</td>
<td>1.9%</td>
<td>1.2%</td>
<td>901</td>
</tr>
<tr>
<td>2016</td>
<td>3.3%</td>
<td>2.1%</td>
<td>1.2%</td>
<td>997</td>
</tr>
<tr>
<td>2017</td>
<td>3.2%</td>
<td>2.1%</td>
<td>1.2%</td>
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</tr>
<tr>
<td>2018</td>
<td>3.1%</td>
<td>1.9%</td>
<td>1.2%</td>
<td>1,004</td>
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</table>

Source: MAPFRE Economic Research (with Private Insurance Superintendency data)

\(^1\) Estimated with respect to net premiums earned; \(^2\) Return on equity; \(^3\) Return on assets; \(^4\) Life Insurance premiums/Total Premiums
Table A.13. Ecuador: main insurance market magnitudes and indicators, 2008-2018 (millions of USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Nominal</td>
<td>Real</td>
<td>651</td>
<td>366</td>
<td>425</td>
<td>122</td>
<td>226</td>
<td>80.6</td>
<td>57</td>
</tr>
<tr>
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<td>720</td>
<td>395</td>
<td>468</td>
<td>135</td>
<td>252</td>
<td>80.7</td>
<td>66</td>
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<tr>
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<td>157</td>
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<td>1.4%</td>
<td>849</td>
<td>480</td>
<td>568</td>
<td>162</td>
<td>301</td>
<td>76.7</td>
<td>96</td>
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<tr>
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<td>1,108</td>
<td>181</td>
<td>926</td>
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<td>13.5%</td>
<td>1,045</td>
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<td>697</td>
<td>199</td>
<td>348</td>
<td>74.0</td>
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<td>15.5%</td>
<td>1,356</td>
<td>674</td>
<td>970</td>
<td>384</td>
<td>385</td>
<td>75.8</td>
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<td>751</td>
<td>1,223</td>
<td>546</td>
<td>422</td>
<td>76.6</td>
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</tr>
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<td>8.8%</td>
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<td>751</td>
<td>1,223</td>
<td>546</td>
<td>422</td>
<td>76.6</td>
<td>164</td>
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<tr>
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<td>70.5</td>
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</tr>
<tr>
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<td>295</td>
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<td>-6.0%</td>
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<td>919</td>
<td>1,448</td>
<td>663</td>
<td>569</td>
<td>76.5</td>
<td>208</td>
</tr>
<tr>
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<td>347</td>
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<td>-2.8%</td>
<td>-4.5%</td>
<td>2,321</td>
<td>952</td>
<td>1,704</td>
<td>895</td>
<td>617</td>
<td>74.9</td>
<td>250</td>
</tr>
<tr>
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<td>370</td>
<td>1,261</td>
<td>0.8%</td>
<td>0.4%</td>
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<td>1,647</td>
<td>831</td>
<td>600</td>
<td>74.8</td>
<td>254</td>
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<tr>
<td>2018</td>
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<td>1,276</td>
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<td>3.8%</td>
<td>2,158</td>
<td>1,043</td>
<td>1,541</td>
<td>840</td>
<td>617</td>
<td>75.9</td>
<td>265</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita)</th>
<th>Depth index</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
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<td>1.2%</td>
<td>61</td>
<td>10</td>
</tr>
<tr>
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<td>0.3%</td>
<td>1.3%</td>
<td>64</td>
<td>11</td>
</tr>
<tr>
<td>2010</td>
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<td>0.3%</td>
<td>1.3%</td>
<td>74</td>
<td>12</td>
</tr>
<tr>
<td>2011</td>
<td>1.7%</td>
<td>0.3%</td>
<td>1.4%</td>
<td>88</td>
<td>15</td>
</tr>
<tr>
<td>2012</td>
<td>1.7%</td>
<td>0.3%</td>
<td>1.4%</td>
<td>96</td>
<td>16</td>
</tr>
<tr>
<td>2013</td>
<td>1.7%</td>
<td>0.3%</td>
<td>1.4%</td>
<td>106</td>
<td>18</td>
</tr>
<tr>
<td>2014</td>
<td>1.7%</td>
<td>0.3%</td>
<td>1.4%</td>
<td>107</td>
<td>17</td>
</tr>
<tr>
<td>2015</td>
<td>1.7%</td>
<td>0.3%</td>
<td>1.4%</td>
<td>100</td>
<td>18</td>
</tr>
<tr>
<td>2016</td>
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<td>0.3%</td>
<td>1.3%</td>
<td>98</td>
<td>21</td>
</tr>
<tr>
<td>2017</td>
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<td>0.4%</td>
<td>1.2%</td>
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<td>22</td>
</tr>
<tr>
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<td>0.4%</td>
<td>1.2%</td>
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</table>

Source: MAPFRE Economic Research (with data from the Superintendency of Companies, Securities and Insurance)

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life insurance premiums/Total Premiums

The Latin American Insurance Market in 2018
Table A.14. Peru: main insurance market magnitudes and indicators, 2008-2018
(million soles)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Nominal</td>
<td>Real</td>
<td>2012</td>
<td>9,063</td>
<td>3,306</td>
<td>4,600</td>
<td>9.6%</td>
<td>5.8%</td>
<td>22,261</td>
</tr>
<tr>
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<td>4,331</td>
<td>1,642</td>
<td>2,660</td>
<td>16.7%</td>
<td>10.3%</td>
<td>12,746</td>
<td>10,898</td>
<td>10,659</td>
<td>9,406</td>
<td>2,087</td>
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<td>-672</td>
</tr>
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<td>1,803</td>
<td>3,388</td>
<td>19.8%</td>
<td>16.4%</td>
<td>14,137</td>
<td>12,041</td>
<td>11,335</td>
<td>9,923</td>
<td>2,803</td>
<td>109.4</td>
<td>-288</td>
</tr>
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<td>26.2%</td>
<td>24.3%</td>
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<td>15,259</td>
<td>13,598</td>
<td>11,852</td>
<td>3,761</td>
<td>111.7</td>
<td>-393</td>
</tr>
<tr>
<td>2011</td>
<td>7,212</td>
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<td>4,102</td>
<td>10.1%</td>
<td>6.5%</td>
<td>19,786</td>
<td>17,371</td>
<td>15,680</td>
<td>13,568</td>
<td>4,106</td>
<td>113.8</td>
<td>-560</td>
</tr>
<tr>
<td>2012</td>
<td>7,906</td>
<td>3,306</td>
<td>4,600</td>
<td>9.6%</td>
<td>5.8%</td>
<td>22,261</td>
<td>19,397</td>
<td>17,634</td>
<td>15,275</td>
<td>4,627</td>
<td>119.0</td>
<td>-809</td>
</tr>
<tr>
<td>2013</td>
<td>9,069</td>
<td>3,750</td>
<td>5,320</td>
<td>14.7%</td>
<td>11.6%</td>
<td>28,172</td>
<td>22,282</td>
<td>23,607</td>
<td>20,482</td>
<td>4,564</td>
<td>117.1</td>
<td>-867</td>
</tr>
<tr>
<td>2014</td>
<td>10,154</td>
<td>4,450</td>
<td>5,704</td>
<td>12.0%</td>
<td>8.4%</td>
<td>33,303</td>
<td>26,271</td>
<td>27,770</td>
<td>24,073</td>
<td>5,534</td>
<td>115.9</td>
<td>-861</td>
</tr>
<tr>
<td>2015</td>
<td>11,744</td>
<td>5,118</td>
<td>6,626</td>
<td>15.7%</td>
<td>11.7%</td>
<td>39,373</td>
<td>31,116</td>
<td>33,637</td>
<td>28,771</td>
<td>5,936</td>
<td>113.4</td>
<td>-843</td>
</tr>
<tr>
<td>2016</td>
<td>11,526</td>
<td>4,592</td>
<td>6,664</td>
<td>-4.2%</td>
<td>-7.9%</td>
<td>42,187</td>
<td>33,725</td>
<td>35,056</td>
<td>30,676</td>
<td>7,131</td>
<td>116.4</td>
<td>-1,082</td>
</tr>
<tr>
<td>2017</td>
<td>11,327</td>
<td>4,811</td>
<td>6,516</td>
<td>0.6%</td>
<td>-2.1%</td>
<td>45,169</td>
<td>35,146</td>
<td>38,084</td>
<td>33,247</td>
<td>7,084</td>
<td>120.6</td>
<td>-1,291</td>
</tr>
<tr>
<td>2018</td>
<td>12,869</td>
<td>5,682</td>
<td>7,186</td>
<td>13.6%</td>
<td>12.1%</td>
<td>48,867</td>
<td>36,955</td>
<td>41,665</td>
<td>36,300</td>
<td>7,202</td>
<td>116.3</td>
<td>-1,276</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Banking, Insurance and AFP Superintendency).
| Year | Total | Life | Non-Life | Nominal | Real | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Life | Total | Life | Non-Line
Table A.16. Chile: main insurance market magnitudes and indicators, 2008-2018
(million pesos)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Technical provisions</th>
<th>Combined ratio&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Real</th>
<th>Equity</th>
<th>Financial result</th>
<th>ROE&lt;sup&gt;2&lt;/sup&gt;</th>
<th>ROA&lt;sup&gt;3&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td>2008</td>
<td>3,638,056</td>
<td>2,174,445</td>
<td>1,463,611</td>
<td>18.9%</td>
<td>9.4%</td>
<td>18,671,752</td>
<td>21,036,181</td>
<td>16,604,169</td>
</tr>
<tr>
<td>2009</td>
<td>3,491,134</td>
<td>2,084,863</td>
<td>1,406,491</td>
<td>-4.0%</td>
<td>-5.4%</td>
<td>19,416,520</td>
<td>22,256,545</td>
<td>17,009,252</td>
</tr>
<tr>
<td>2010</td>
<td>4,228,291</td>
<td>2,358,164</td>
<td>1,670,127</td>
<td>21.1%</td>
<td>19.4%</td>
<td>21,417,926</td>
<td>23,766,697</td>
<td>18,665,080</td>
</tr>
<tr>
<td>2011</td>
<td>5,072,445</td>
<td>2,396,333</td>
<td>2,031,111</td>
<td>18.9%</td>
<td>15.1%</td>
<td>23,278,241</td>
<td>25,082,990</td>
<td>20,493,396</td>
</tr>
<tr>
<td>2012</td>
<td>5,471,147</td>
<td>2,628,211</td>
<td>2,202,526</td>
<td>8.8%</td>
<td>5.7%</td>
<td>26,865,447</td>
<td>26,737,945</td>
<td>23,151,844</td>
</tr>
<tr>
<td>2013</td>
<td>5,799,279</td>
<td>3,460,278</td>
<td>2,339,001</td>
<td>6.0%</td>
<td>4.1%</td>
<td>28,983,911</td>
<td>28,460,050</td>
<td>25,762,739</td>
</tr>
<tr>
<td>2014</td>
<td>6,223,280</td>
<td>3,648,398</td>
<td>2,574,881</td>
<td>7.3%</td>
<td>2.5%</td>
<td>32,735,709</td>
<td>30,259,750</td>
<td>29,381,835</td>
</tr>
<tr>
<td>2015</td>
<td>7,408,342</td>
<td>4,539,651</td>
<td>2,868,891</td>
<td>19.0%</td>
<td>14.1%</td>
<td>37,066,640</td>
<td>32,281,107</td>
<td>33,332,714</td>
</tr>
<tr>
<td>2016</td>
<td>8,361,783</td>
<td>5,260,639</td>
<td>3,060,644</td>
<td>12.1%</td>
<td>8.0%</td>
<td>40,583,576</td>
<td>36,493,884</td>
<td>36,532,471</td>
</tr>
<tr>
<td>2017</td>
<td>8,268,352</td>
<td>5,081,617</td>
<td>3,186,734</td>
<td>-0.4%</td>
<td>-2.5%</td>
<td>43,853,552</td>
<td>39,657,528</td>
<td>39,521,405</td>
</tr>
<tr>
<td>2018</td>
<td>8,897,309</td>
<td>5,407,209</td>
<td>3,490,400</td>
<td>7.6%</td>
<td>5.2%</td>
<td>47,798,519</td>
<td>42,967,393</td>
<td>43,233,678</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita)</th>
<th>Depth index&lt;sup&gt;4&lt;/sup&gt;</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td>2008</td>
<td>3.9%</td>
<td>2.3%</td>
<td>1.6%</td>
<td>217,740</td>
<td>130,142</td>
</tr>
<tr>
<td>2009</td>
<td>3.6%</td>
<td>2.2%</td>
<td>1.5%</td>
<td>206,758</td>
<td>123,466</td>
</tr>
<tr>
<td>2010</td>
<td>3.8%</td>
<td>2.3%</td>
<td>1.5%</td>
<td>247,811</td>
<td>149,929</td>
</tr>
<tr>
<td>2011</td>
<td>4.1%</td>
<td>2.5%</td>
<td>1.7%</td>
<td>291,724</td>
<td>173,866</td>
</tr>
<tr>
<td>2012</td>
<td>4.2%</td>
<td>2.5%</td>
<td>1.7%</td>
<td>314,427</td>
<td>187,848</td>
</tr>
<tr>
<td>2013</td>
<td>4.2%</td>
<td>2.5%</td>
<td>1.7%</td>
<td>330,039</td>
<td>196,925</td>
</tr>
<tr>
<td>2014</td>
<td>4.2%</td>
<td>2.5%</td>
<td>1.7%</td>
<td>350,430</td>
<td>205,440</td>
</tr>
<tr>
<td>2015</td>
<td>4.6%</td>
<td>2.8%</td>
<td>1.8%</td>
<td>412,276</td>
<td>252,622</td>
</tr>
<tr>
<td>2016</td>
<td>4.9%</td>
<td>3.1%</td>
<td>1.8%</td>
<td>455,887</td>
<td>288,902</td>
</tr>
<tr>
<td>2017</td>
<td>4.6%</td>
<td>2.8%</td>
<td>1.8%</td>
<td>447,653</td>
<td>275,122</td>
</tr>
<tr>
<td>2018</td>
<td>4.7%</td>
<td>2.8%</td>
<td>1.8%</td>
<td>475,067</td>
<td>288,705</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research (with data from the Commission for the Financial Market)
<sup>1</sup> Estimated with respect to net premiums earned; <sup>2</sup> Return on equity; <sup>3</sup> Return on assets; <sup>4</sup> Life insurance premiums/Total Premiums

The Insurance Protection Gap (IPG) as a real insurance market multiple

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Life</th>
<th>Non-Life</th>
<th>Total</th>
<th>Life</th>
<th>Non-Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3,976,995</td>
<td>2,232,035</td>
<td>1,652,960</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>2009</td>
<td>4,560,262</td>
<td>2,646,528</td>
<td>1,913,734</td>
<td>1.3</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>2010</td>
<td>4,914,584</td>
<td>2,824,469</td>
<td>2,090,115</td>
<td>1.2</td>
<td>1.1</td>
<td>1.3</td>
</tr>
<tr>
<td>2011</td>
<td>4,903,554</td>
<td>2,820,321</td>
<td>2,083,231</td>
<td>1.0</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>2012</td>
<td>5,190,895</td>
<td>2,988,112</td>
<td>2,204,782</td>
<td>0.9</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>2013</td>
<td>5,125,697</td>
<td>2,764,032</td>
<td>2,365,666</td>
<td>0.9</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>2014</td>
<td>5,619,595</td>
<td>3,180,267</td>
<td>2,439,328</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>2015</td>
<td>5,428,777</td>
<td>2,843,116</td>
<td>2,585,660</td>
<td>0.7</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>2016</td>
<td>4,850,649</td>
<td>2,086,644</td>
<td>2,763,005</td>
<td>0.6</td>
<td>0.4</td>
<td>0.9</td>
</tr>
<tr>
<td>2017</td>
<td>5,486,110</td>
<td>2,581,853</td>
<td>2,904,257</td>
<td>0.7</td>
<td>0.5</td>
<td>0.9</td>
</tr>
<tr>
<td>2018</td>
<td>5,802,280</td>
<td>2,781,155</td>
<td>3,021,126</td>
<td>0.7</td>
<td>0.5</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Table A.17. Paraguay: main insurance market magnitudes and indicators, 2008-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Premiums (million guaranís)</th>
<th>Life Premiums (million guaranís)</th>
<th>Non-Life Premiums (million guaranís)</th>
<th>Source: MAPFRE Economic Research (with data from the Insurance Superintendency, Central Bank of Paraguay)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>695,003</td>
<td>73,341</td>
<td>621,662</td>
<td>Estimated with respect to net premiums earned; <em>R</em></td>
</tr>
<tr>
<td>2009</td>
<td>833,772</td>
<td>75,341</td>
<td>758,431</td>
<td>Return on equity; n/a</td>
</tr>
<tr>
<td>2010</td>
<td>1,201,832</td>
<td>102,523</td>
<td>1,199,309</td>
<td>Return on assets; n/a</td>
</tr>
<tr>
<td>2011</td>
<td>1,212,857</td>
<td>122,857</td>
<td>1,090,000</td>
<td>Life Insurance premiums /Total Premiums</td>
</tr>
<tr>
<td>2012</td>
<td>1,423,425</td>
<td>177,425</td>
<td>1,246,000</td>
<td>Technical result</td>
</tr>
<tr>
<td>2013</td>
<td>2,527,763</td>
<td>252,763</td>
<td>2,275,000</td>
<td>Financial result</td>
</tr>
<tr>
<td>2014</td>
<td>2,338,258</td>
<td>233,825</td>
<td>2,104,433</td>
<td>ROE</td>
</tr>
<tr>
<td>2015</td>
<td>2,168,747</td>
<td>168,747</td>
<td>2,000,000</td>
<td>ROA</td>
</tr>
<tr>
<td>2016</td>
<td>2,184,872</td>
<td>184,872</td>
<td>1,999,900</td>
<td>IPG as a real insurance market multiple</td>
</tr>
<tr>
<td>2017</td>
<td>2,328,598</td>
<td>232,859</td>
<td>2,095,739</td>
<td>Life Insurance Protection Gap</td>
</tr>
<tr>
<td>2018</td>
<td>2,537,183</td>
<td>253,718</td>
<td>2,283,465</td>
<td>The Insurance Protection Gap</td>
</tr>
</tbody>
</table>

Note: Life = Life Insurance; Non-Life = Non-Life Insurance; Total = Total Premiums.

The Latin American Insurance Market in 2018

Fundación MAPFRE Economic Research.

[Reference: MAPFRE Economic Research]
### Table A.18. Argentina: main insurance market magnitudes and indicators, 2008-2018

(million pesos)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Nominal</td>
<td>Real</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>26,157</td>
<td>5,852</td>
<td>20,305</td>
<td>21.7%</td>
<td>12.1%</td>
<td>47,771</td>
<td>37,367</td>
<td>39,295</td>
<td>33,188</td>
<td>8,476</td>
<td>107.9</td>
<td>-1,577</td>
</tr>
<tr>
<td>2009</td>
<td>29,097</td>
<td>4,898</td>
<td>24,198</td>
<td>11.2%</td>
<td>4.7%</td>
<td>56,132</td>
<td>43,780</td>
<td>45,386</td>
<td>38,042</td>
<td>10,746</td>
<td>117.7</td>
<td>-4,004</td>
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<tr>
<td>2010</td>
<td>38,784</td>
<td>6,218</td>
<td>32,566</td>
<td>33.3%</td>
<td>20.7%</td>
<td>67,612</td>
<td>52,114</td>
<td>54,630</td>
<td>42,329</td>
<td>12,982</td>
<td>110.7</td>
<td>-3,290</td>
</tr>
<tr>
<td>2011</td>
<td>52,213</td>
<td>8,704</td>
<td>43,509</td>
<td>34.6%</td>
<td>22.6%</td>
<td>82,077</td>
<td>61,866</td>
<td>66,680</td>
<td>55,231</td>
<td>15,597</td>
<td>107.4</td>
<td>-3,139</td>
</tr>
<tr>
<td>2012</td>
<td>69,062</td>
<td>11,625</td>
<td>57,437</td>
<td>32.3%</td>
<td>20.2%</td>
<td>105,071</td>
<td>78,310</td>
<td>84,977</td>
<td>69,572</td>
<td>20,094</td>
<td>113.5</td>
<td>-7,662</td>
</tr>
<tr>
<td>2013</td>
<td>93,389</td>
<td>15,262</td>
<td>78,127</td>
<td>35.2%</td>
<td>22.2%</td>
<td>139,358</td>
<td>103,916</td>
<td>112,499</td>
<td>92,121</td>
<td>26,858</td>
<td>116.2</td>
<td>-12,274</td>
</tr>
<tr>
<td>2014</td>
<td>129,421</td>
<td>21,032</td>
<td>108,389</td>
<td>38.6%</td>
<td>-2.4%</td>
<td>188,896</td>
<td>142,120</td>
<td>151,932</td>
<td>123,804</td>
<td>36,964</td>
<td>116.2</td>
<td>-16,835</td>
</tr>
<tr>
<td>2015</td>
<td>180,472</td>
<td>28,285</td>
<td>152,187</td>
<td>39.4%</td>
<td>10.6%</td>
<td>271,656</td>
<td>208,840</td>
<td>216,615</td>
<td>175,855</td>
<td>55,241</td>
<td>114.0</td>
<td>-20,591</td>
</tr>
<tr>
<td>2016</td>
<td>243,602</td>
<td>37,979</td>
<td>205,622</td>
<td>34.8%</td>
<td>-3.0%</td>
<td>379,860</td>
<td>292,721</td>
<td>298,885</td>
<td>245,173</td>
<td>80,975</td>
<td>118.1</td>
<td>-35,988</td>
</tr>
<tr>
<td>2017</td>
<td>302,312</td>
<td>42,577</td>
<td>259,734</td>
<td>24.1%</td>
<td>-1.3%</td>
<td>502,009</td>
<td>390,929</td>
<td>390,617</td>
<td>321,404</td>
<td>111,392</td>
<td>112.6</td>
<td>-44,365</td>
</tr>
<tr>
<td>2018</td>
<td>391,954</td>
<td>52,749</td>
<td>339,205</td>
<td>29.5%</td>
<td>-3.5%</td>
<td>724,417</td>
<td>562,540</td>
<td>564,612</td>
<td>458,667</td>
<td>163,805</td>
<td>126.0</td>
<td>-102,864</td>
</tr>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita)</th>
<th>Depth index</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Life</td>
<td>Non-Life</td>
<td>Total</td>
<td>Life</td>
</tr>
<tr>
<td></td>
<td>Life per capita (million pesos)</td>
<td></td>
<td>Non-Life</td>
<td>Life</td>
<td>Non-Life</td>
</tr>
<tr>
<td>2008</td>
<td>2.3%</td>
<td>0.5%</td>
<td>1.8%</td>
<td>653</td>
<td>146</td>
</tr>
<tr>
<td>2009</td>
<td>2.3%</td>
<td>0.4%</td>
<td>1.9%</td>
<td>719</td>
<td>121</td>
</tr>
<tr>
<td>2010</td>
<td>2.3%</td>
<td>0.4%</td>
<td>2.0%</td>
<td>948</td>
<td>152</td>
</tr>
<tr>
<td>2011</td>
<td>2.4%</td>
<td>0.4%</td>
<td>2.0%</td>
<td>1,264</td>
<td>211</td>
</tr>
<tr>
<td>2012</td>
<td>2.6%</td>
<td>0.4%</td>
<td>2.2%</td>
<td>1,634</td>
<td>278</td>
</tr>
<tr>
<td>2013</td>
<td>2.8%</td>
<td>0.5%</td>
<td>2.3%</td>
<td>2,213</td>
<td>362</td>
</tr>
<tr>
<td>2014</td>
<td>2.8%</td>
<td>0.5%</td>
<td>2.4%</td>
<td>3,035</td>
<td>493</td>
</tr>
<tr>
<td>2015</td>
<td>3.0%</td>
<td>0.5%</td>
<td>2.6%</td>
<td>4,194</td>
<td>657</td>
</tr>
<tr>
<td>2016</td>
<td>3.0%</td>
<td>0.5%</td>
<td>2.5%</td>
<td>5,599</td>
<td>873</td>
</tr>
<tr>
<td>2017</td>
<td>2.8%</td>
<td>0.4%</td>
<td>2.4%</td>
<td>6,881</td>
<td>969</td>
</tr>
<tr>
<td>2018</td>
<td>2.7%</td>
<td>0.4%</td>
<td>2.3%</td>
<td>8,827</td>
<td>1,189</td>
</tr>
</tbody>
</table>

Source: MAPFRE Economic Research [with data from the country’s insurance superintendency].

1 Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life insurance premiums/Total Premiums.
Table A.19. Uruguay: main insurance market magnitudes and indicators, 2008-2018 (million pesos)

<table>
<thead>
<tr>
<th>Year</th>
<th>Premiums</th>
<th>Premium growth</th>
<th>Assets</th>
<th>Investments</th>
<th>Liabilities</th>
<th>Technical provisions</th>
<th>Equity</th>
<th>Combined ratio(^1)</th>
<th>Technical result</th>
<th>Financial result</th>
<th>ROE(^2)</th>
<th>ROA(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>10,784</td>
<td>2,206</td>
<td>8,578</td>
<td>20.0%</td>
<td>11.2%</td>
<td>23,677</td>
<td>17,687</td>
<td>18,261</td>
<td>15,009</td>
<td>5,416</td>
<td>102.0</td>
<td>-178</td>
</tr>
<tr>
<td>2009</td>
<td>12,693</td>
<td>2,719</td>
<td>9,975</td>
<td>17.7%</td>
<td>9.9%</td>
<td>28,006</td>
<td>22,027</td>
<td>21,999</td>
<td>18,592</td>
<td>6,007</td>
<td>113.5</td>
<td>-1,452</td>
</tr>
<tr>
<td>2010</td>
<td>14,581</td>
<td>3,472</td>
<td>11,109</td>
<td>14.9%</td>
<td>7.7%</td>
<td>35,109</td>
<td>28,237</td>
<td>27,334</td>
<td>23,547</td>
<td>7,775</td>
<td>106.0</td>
<td>-743</td>
</tr>
<tr>
<td>2011</td>
<td>17,637</td>
<td>4,261</td>
<td>13,377</td>
<td>21.0%</td>
<td>11.9%</td>
<td>40,986</td>
<td>33,942</td>
<td>32,806</td>
<td>29,069</td>
<td>8,180</td>
<td>101.3</td>
<td>-192</td>
</tr>
<tr>
<td>2012</td>
<td>21,564</td>
<td>5,884</td>
<td>15,880</td>
<td>22.3%</td>
<td>13.1%</td>
<td>50,863</td>
<td>42,464</td>
<td>41,286</td>
<td>36,799</td>
<td>9,576</td>
<td>105.1</td>
<td>-963</td>
</tr>
<tr>
<td>2013</td>
<td>24,749</td>
<td>7,100</td>
<td>17,648</td>
<td>14.8%</td>
<td>5.7%</td>
<td>62,045</td>
<td>52,154</td>
<td>51,851</td>
<td>46,470</td>
<td>10,554</td>
<td>106.8</td>
<td>-1470</td>
</tr>
<tr>
<td>2014</td>
<td>30,285</td>
<td>8,937</td>
<td>21,347</td>
<td>22.4%</td>
<td>12.4%</td>
<td>77,793</td>
<td>65,068</td>
<td>65,535</td>
<td>58,548</td>
<td>12,259</td>
<td>101.9</td>
<td>-487</td>
</tr>
<tr>
<td>2015</td>
<td>34,910</td>
<td>11,472</td>
<td>23,478</td>
<td>15.3%</td>
<td>6.1%</td>
<td>96,715</td>
<td>83,041</td>
<td>82,354</td>
<td>74,257</td>
<td>14,352</td>
<td>104.6</td>
<td>-1,432</td>
</tr>
<tr>
<td>2016</td>
<td>38,531</td>
<td>14,707</td>
<td>23,824</td>
<td>10.4%</td>
<td>0.7%</td>
<td>115,866</td>
<td>99,900</td>
<td>100,114</td>
<td>90,779</td>
<td>15,752</td>
<td>105.9</td>
<td>-2,073</td>
</tr>
<tr>
<td>2017</td>
<td>45,207</td>
<td>19,075</td>
<td>26,132</td>
<td>17.3%</td>
<td>10.5%</td>
<td>140,142</td>
<td>123,081</td>
<td>121,707</td>
<td>113,058</td>
<td>18,435</td>
<td>105.9</td>
<td>-2,426</td>
</tr>
<tr>
<td>2018</td>
<td>45,787</td>
<td>18,196</td>
<td>27,591</td>
<td>1.3%</td>
<td>-5.9%</td>
<td>162,306</td>
<td>144,809</td>
<td>142,141</td>
<td>133,506</td>
<td>20,165</td>
<td>107.8</td>
<td>-3,269</td>
</tr>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Penetration (premiums/GDP)</th>
<th>Density (premiums per capita)</th>
<th>Depth index(^4)</th>
<th>The Insurance Protection Gap</th>
<th>IPG as a real insurance market multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Life Non-Life</td>
<td>Total Life Non-Life</td>
<td>Total Life Non-Life</td>
<td>Total Life Non-Life</td>
<td>Total Life Non-Life</td>
</tr>
<tr>
<td>2008</td>
<td>1.7% 0.3% 1.3%</td>
<td>3.229 661 2,568</td>
<td>20.5%</td>
<td>40,874 28,310 12,564</td>
<td>3.8 12.8 1.5</td>
</tr>
<tr>
<td>2009</td>
<td>1.8% 0.4% 1.4%</td>
<td>3.789 812 2,978</td>
<td>21.4%</td>
<td>46,897 32,298 14,598</td>
<td>3.7 11.9 1.5</td>
</tr>
<tr>
<td>2010</td>
<td>1.8% 0.4% 1.4%</td>
<td>4,340 1,034 3,307</td>
<td>23.8%</td>
<td>51,745 35,576 16,170</td>
<td>3.5 10.2 1.5</td>
</tr>
<tr>
<td>2011</td>
<td>1.9% 0.5% 1.4%</td>
<td>5,235 1,265 3,971</td>
<td>24.2%</td>
<td>57,813 39,931 17,882</td>
<td>3.3 9.4 1.3</td>
</tr>
<tr>
<td>2012</td>
<td>2.1% 0.5% 1.5%</td>
<td>6,382 1,682 4,700</td>
<td>26.4%</td>
<td>63,896 44,450 19,446</td>
<td>3.0 7.8 1.2</td>
</tr>
<tr>
<td>2013</td>
<td>2.1% 0.6% 1.5%</td>
<td>7,302 2,095 5,207</td>
<td>28.7%</td>
<td>68,626 46,046 22,562</td>
<td>2.8 6.5 1.3</td>
</tr>
<tr>
<td>2014</td>
<td>2.3% 0.7% 1.6%</td>
<td>8,906 2,628 6,278</td>
<td>29.5%</td>
<td>75,773 52,216 23,557</td>
<td>2.5 5.8 1.1</td>
</tr>
<tr>
<td>2015</td>
<td>2.4% 0.8% 1.6%</td>
<td>10,422 3,421 6,811</td>
<td>33.4%</td>
<td>82,237 55,699 26,538</td>
<td>2.4 4.8 1.1</td>
</tr>
<tr>
<td>2016</td>
<td>2.4% 0.9% 1.5%</td>
<td>11,253 4,295 6,958</td>
<td>38.2%</td>
<td>84,841 54,215 30,626</td>
<td>2.2 3.7 1.3</td>
</tr>
<tr>
<td>2017</td>
<td>2.7% 1.1% 1.5%</td>
<td>13,154 5,551 7,604</td>
<td>42.2%</td>
<td>84,354 53,111 31,243</td>
<td>1.9 2.8 1.2</td>
</tr>
<tr>
<td>2018</td>
<td>2.5% 1.0% 1.5%</td>
<td>13,274 5,275 7,999</td>
<td>39.7%</td>
<td>96,297 60,950 35,347</td>
<td>2.1 3.3 1.3</td>
</tr>
</tbody>
</table>

Source: Source: MAPFRE Economic Research (using data from the Uruguay Central Bank.)

\(^1\) Estimated with respect to net premiums earned; 2 Return on equity; 3 Return on assets; 4 Life Insurance premiums/Total Premiums.


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


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