

# World Insurance Investment Index

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## 1. INTRODUCTION

Insurance, today, is the cornerstone of healthcare in any society. Quality healthcare institutions cannot develop in a country where the large majority of people are uninsured.

Insurance on the one hand allows people freedom to choose the best healthcare provider, without worrying for the cost, and on the other incentivizes healthcare service providers to invest in latest technologies and offer the best services.

The need for insurance has been aptly stated by Senator Mr. Daniel Akaka: "A tremendous amount of needless pain and suffering can be eliminated by ensuring that health insurance is universally available."

The issue, for Governments and for Insurance Companies, is to identify regions and areas most suitable for investment by the Insurance sector. This will ensure a win-win situation for all stakeholders.

The "World Insurance Investment Index" provides a ready reckoner for Insurance Companies in identifying the best countries for them to invest. The Index also helps Governments identify the key areas they should work on if they wish to make their countries a more attractive destination for investment by Insurance companies.

## 2. METHODOLOGY

Countries are ranked on 7 parameters, namely:

1	Household out-of-pocket payment health expenditure as % of GDP
2	Insurance Density (US\$)
3	Insurance Penetration (%)
4	Population (nos.)
5	GDP - real growth rate (%)
6	GDP - per capita (PPP) (US\$)
7	Hospital bed density (beds/1,000 population)

For this data was collected primarily from the OECD Health Statistics available on <https://www.oecd-ilibrary.org>. Some data was also collected from <https://www.indexmundi.com/>

Each country was ranked on each parameter, on basis of the collected data. A composite / weighted score for each country was arrived at by multiplying rank of each of the individual parameters with the assigned weights. The following weights are assigned to the various parameters:

	Parameter	Weight
1	Household out-of-pocket payment health expenditure as % of GDP	15%
2	Insurance Density (US\$)	10%
3	Insurance Penetration (%)	15%
4	Population (nos.)	20%
5	GDP - real growth rate (%)	15%
6	GDP - per capita (PPP) (US\$)	15%
7	Hospital bed density (beds/1,000 population)	10%
	<b>Total</b>	<b>100%</b>

*For example:*

The table below illustrates how the calculations have been done to arrive at the index score. The data for India have been considered to demonstrate the same.

The first column (A) are the various parameters on which the index is based.

Column (B) has the value of the specified parameter. This value has been procured from the various data sources mentioned herein-above.

Column (C) has the relative position / rank for each of the parameter. This relative rank / position is based on the relative position where the specific value lies with respect to the value of the other countries being measured. e.g. India has 2.2% of its GDP being spent as Household out-of-pocket payment

expenditure and its relative position / rank, for this parameter, is 9 when compared to the other countries in the list.

Column (D) are the assigned weights. For Household out-of-pocket payment expenditure as % of GDP we have assigned an index weight of 15%.

Column (E) is arrived at by multiplying the Relative Position / Rank (C) with the assigned Weightage (D).

Once similar exercise has been done for each of the parameters, we arrive at a total **Composite weight / Score of 15.35 for India.**

Now India is finally ranked on the achieved Composite weight / Score with respect to the other countries under observation in the Index. This final rank is the position of the country in the Index. In the instant example, **India has achieved a Final Rank of 3 in the Index.**

Illustrative calculation for India					
	(A)	(B)	(C)	(D)	(E) = C * D
S. No.	Parameter	Value	Relative Position / Rank	Weightage	Composite / Weighted Score
1	Household out-of-pocket payment health expenditure as % of GDP	2.2%	9	15%	1.35
2	Insurance Density (US\$)	\$72	23	10%	0.10
3	Insurance Penetration (%)	3.6%	16	15%	2.40
4	Population (nos.)	1,354,051,854	2	20%	0.40
5	GDP - real growth rate (%)	5%	3	15%	0.45
6	GDP - per capita (PPP) (US\$)	\$7,200	43	15%	6.45
7	Hospital bed density (beds/1,000 population)	1	42	10%	4.20
		<b>Total</b>		<b>100%</b>	<b>15.35</b>

Since, there are only 43 countries under observation, India has achieved the 3rd place in the Index. This reflects that for World Insurance Investment Index, **India is placed 3rd amongst the 43 countries under observation.** Complete data, along-with calculations & graphical representation, for all countries are enclosed at **Annexure 1 & 2** respectively.

### 3. ANALYSIS

All the components of comprising the index have been carefully selected and there is a complex inter-play of factors, to arrive at an optimum solution. A brief analysis of how each factor has been analysed is given below:

1. Household out-of-pocket payment health expenditure as % of GDP: A high rank on this value represents that citizens of that country spend more out of pocket and thus present an opportunity for companies to offer them various Insurance products e.g. Switzerland spends 3.1% of its GDP towards out-of-pocket health expenditure, thereby achieving 1st rank.
2. Insurance Density & Insurance Penetration: These parameters represent the development of insurance sector in a country. It is quite logical that countries where insurance sector are less developed will present a greater opportunity and would be ranked higher e.g. India with an Insurance Density of \$72 and Russia with an

Insurance Penetration of just 1.4% have achieved top rank in their respective factors.

3. Population: Population represents potential market size and therefore countries with higher population will achieve higher rank. Not surprising that China & India have achieved the top two rankings on this parameter.
4. GDP - real growth rate and GDP Per Capita (PPP): These parameters represent the existing purchasing power and the future growth potential of the population in a country. These factors are important to identify potential stars of the future. Whereas a country like Luxemburg achieves 1st position on GDP per Capita but Ireland achieves 1st positing when it comes to real GDP growth.
5. Hospital bed density (beds/1,000 population): This is an extremely important factor as this factor sets the capacity of a country to cater to the healthcare requirements of its population. There is no point in having sophisticated health insurance when there is little capacity among the healthcare service providers. Countries with high bed counts have scored higher ranks on this factor e.g. Japan & Korea with 13 & 12 beds / 1000 population have achieved rank of 1 & 2 respectively on this factor.

The final ranking of countries on the World Insurance Investment Index, based on above parameters, are given below:

Country	Composite / Weighted Score	Final Rank
Russia	12.30	1
China	14.55	2
India	15.35	3
Greece	15.65	4
Hungary	15.85	5
Lithuania	16.15	6
Poland	16.25	7
Korea	17.75	8
Australia	17.85	9
Brazil	18.15	10
Indonesia	18.25	11
Canada	18.80	12
United States	18.90	13
Spain	18.90	14
Latvia	19.00	15
Germany	19.30	16
Mexico	19.60	17
Czech Republic	19.65	18
Austria	20.15	19
Turkey	20.35	20
Portugal	20.45	21
Japan	20.75	22
Belgium	21.20	23
Colombia	21.40	24
Estonia	21.40	25
Switzerland	21.60	26
Iceland	21.95	27
Israel	22.05	28
New Zealand	22.10	29
Chile	22.35	30
Finland	22.90	31

Country	Composite / Weighted Score	Final Rank
Italy	23.65	32
France	24.10	33
Slovak Republic	24.15	34
Norway	24.35	35
United Kingdom	24.45	36
Denmark	25.40	37
Netherlands	25.60	38
Slovenia	26.05	39
Sweden	26.45	40
Ireland	26.55	41
Luxembourg	28.95	42
South Africa	32.85	43

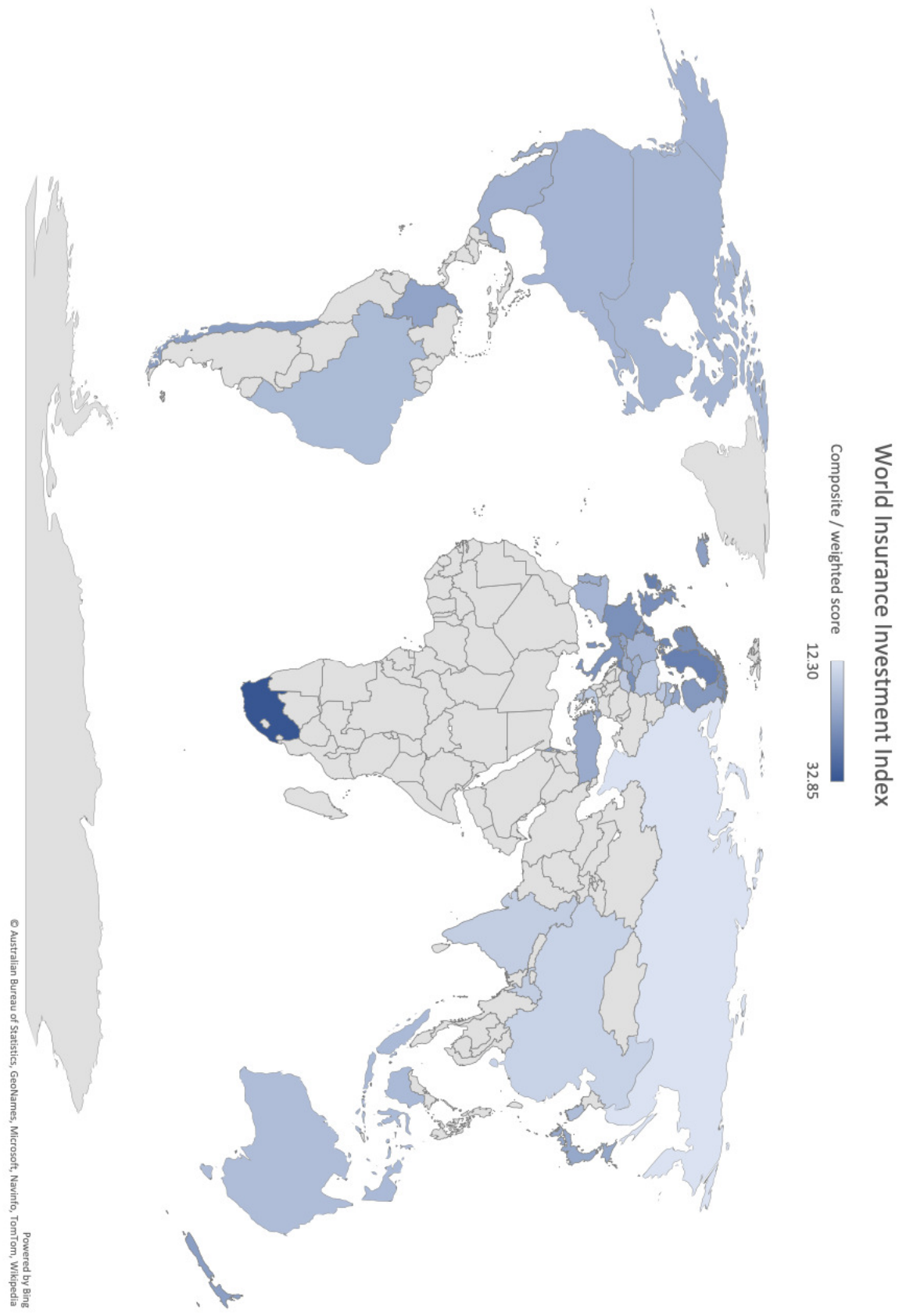
Russia, China & India come out as the top-3 investment destinations for Insurance companies.

#### 4. CONCLUSION

- BRICS countries, with the exception of South Africa, have emerged as the top destinations for investment consideration for the Insurance companies.
- South Africa would have achieved a better rank but for its negligible GDP growth and low GDP per capita on PPP basis.
- The index while providing guidance for insurance companies, also presents startling facts for Government of various countries. For example, a country like Indonesia would have been a top investment destination if only its population would spend more on healthcare – the out-of-pocket expense for Indonesia as % of GDP is just 1%.
- The Index presents an opportunity for the Insurance companies to identify present investment opportunities.
- The Index will further help Insurance companies keep a close watch on countries to evaluate upcoming, future opportunities by studying the various parameters forming the index.

ANNEXURES

World Insurance Index Data																							
Country	Household out-of-pocket payment expenditure as % of GDP		Insurance Density (US\$)		Insurance Penetration (%)		GDP - real growth rate (%)		GDP - per capita (ppp) (US\$)		Hospital bed density (beds/1,000 population)		Composite / weighted score										
	2017	Rank	2017	Rank	2017	Rank	2020	Rank	2017	Rank	2017	Rank											
Australia	1.7	20	2,540	29	2.90	4.4	19	2.85	2,469,928,600	30	4.00	2	12	1.80	50,400	10	1.50	4	18	1.80	17.85	9	
Austria	1.7	3.00	2,540	29	2.90	4.4	19	2.85	2,469,928,600	30	4.00	2	12	1.80	50,400	10	1.50	4	18	1.80	17.85	9	
Belgium	2.0	13	1.95	2,176	27	2.70	4.6	21	3.15	88,37,707	20	6.00	1	27	4.05	50,000	12	1.80	7	5	0.50	20.15	19
Brazil	2.6	5	0.75	321	8	0.80	3.2	14	2.10	20,84,94,900	5	1.00	1	27	4.05	15,600	39	5.85	2	36	3.60	18.15	10
Canada	1.6	23	3.45	2,011	26	2.60	4.4	20	3.00	3,70,58,856	19	3.80	2	12	1.80	48,400	13	1.95	3	22	2.20	18.80	12
Chile	3.0	2	0.30	692	15	1.50	4.6	22	3.30	1,87,51,405	21	4.20	1	27	4.05	24,600	36	5.40	2	36	3.60	22.35	30
China	1.8	18	2.70	473	13	1.30	4.3	18	2.70	1,41,50,45,928	1	0.20	6	1	0.15	18,200	38	5.70	4	18	1.80	14.55	2
Colombia	1.2	34	5.10	179	5	0.50	2.8	11	1.65	4,98,34,240	16	3.20	3	9	1.35	14,400	40	6.00	2	36	3.60	21.40	24
Czechia	1.1	37	5.55	590	14	1.40	2.9	12	1.80	1,06,26,430	25	5.00	2	12	1.80	35,500	24	3.60	7	5	0.50	19.65	18
Denmark	1.4	29	4.35	631.5	39	3.90	11.0	37	5.55	57,89,957	32	6.40	3	3	0.45	50,100	11	1.65	3	22	2.20	25.40	37
Estonia	1.6	22	3.30	702	16	1.60	3.4	15	2.25	13,21,977	41	8.20	5	3	0.45	31,700	28	4.20	5	14	1.40	21.40	25
Finland	1.7	19	2.85	1,803	24	2.40	3.9	17	2.55	55,15,525	33	6.60	1	27	4.05	44,500	15	2.25	3	22	2.20	22.90	31
France	1.1	36	5.40	4,248	35	3.50	10.6	36	5.40	6,69,41,698	11	2.20	1	27	4.05	44,100	17	2.55	6	10	1.00	24.10	33
Germany	1.4	28	4.20	2,838	31	3.10	6.4	30	4.50	8,29,14,191	9	1.80	1	27	4.05	50,800	9	1.35	8	3	0.30	19.30	16
Greece	2.8	3	0.45	388	11	1.10	2.1	5	0.75	1,07,25,886	24	4.80	2	12	1.80	27,800	33	4.95	4	18	1.80	15.65	4
Hungary	1.8	9	2.55	350	9	0.90	2.4	9	1.35	97,67,600	28	5.60	5	3	0.45	29,600	30	4.50	7	5	0.50	15.85	5
Iceland	1.4	30	4.50	1,783	23	2.30	2.5	10	1.50	3,52,722	43	8.60	2	12	1.80	52,200	7	1.05	3	22	2.20	21.95	27
India	2.2	9	1.35	72	1	0.10	3.6	16	2.40	1,35,40,51,854	2	0.40	5	3	0.45	7,200	43	6.45	1	42	4.20	15.35	3
Indonesia	1.0	38	5.70	73	2	0.20	1.9	4	0.60	26,50,15,300	4	0.80	5	3	0.45	12,400	42	6.30	1	42	4.20	18.25	11
Ireland	0.9	40	6.00	10,205	42	4.20	14.7	42	6.30	48,57,015	37	7.40	6	1	0.15	73,200	2	0.30	3	22	2.20	26.55	41
Israel	1.6	21	3.15	2,001	25	2.50	4.9	24	3.60	88,72,943	29	5.80	3	9	1.35	36,400	23	3.45	3	22	2.20	22.05	28
Italy	2.1	12	1.80	2,437	28	2.80	7.5	32	4.80	6,04,21,797	13	2.60	0	41	6.15	38,200	22	3.30	3	22	2.20	23.65	32
Japan	1.4	31	4.65	2,893	32	3.20	7.4	31	4.65	12,64,43,180	7	1.40	1	27	4.05	42,900	18	2.70	13	1	0.10	20.75	22
Korea	2.3	7	1.05	3,478	33	3.30	11.0	37	5.55	5,16,35,256	15	3.00	2	12	1.80	39,500	19	2.85	7	2	0.20	17.75	8
Latvia	2.5	6	0.90	374	30	1.00	2.4	8	1.20	19,27,170	40	8.00	2	12	1.80	27,200	34	5.10	6	10	1.00	19.00	15
Lithuania	2.1	11	1.65	317	7	0.70	1.9	3	0.45	28,01,541	38	7.60	4	8	1.20	32,400	27	4.05	7	5	0.50	16.15	6
Luxembourg	0.6	43	6.45	41,043	43	4.30	37.8	43	6.45	6,07,950	42	8.40	2	12	1.80	1,05,100	1	0.15	5	14	1.40	28.95	42
Mexico	2.3	8	1.20	211	6	0.60	2.3	6	0.90	12,53,27,797	8	1.40	0	41	6.15	19,900	37	5.55	2	36	3.60	19.60	17
Netherlands	1.1	35	5.25	4,626	37	3.70	9.5	35	5.25	1,72,31,622	22	4.40	1	63	6.15	53,900	6	0.90	3	22	2.20	25.60	38
New Zealand	1.2	33	4.95	1,006	19	1.90	2.4	7	1.05	48,85,500	36	7.20	2	12	1.80	39,000	20	3.00	3	22	2.20	22.10	29
Norway	1.5	27	3.90	3,858	34	3.40	5.1	25	3.75	53,11,916	35	7.00	1	27	4.05	72,100	3	0.45	4	18	1.80	16.25	7
Poland	1.5	27	4.05	420	12	1.20	3.0	13	1.95	3,94,13,139	18	3.60	5	3	0.45	29,600	30	4.50	7	5	0.50	16.25	7
Portugal	2.8	4	0.60	1,189	21	2.10	5.5	28	4.20	1,02,83,822	26	5.20	2	12	1.80	30,500	29	4.35	3	22	2.20	20.45	21
Russia	2.2	10	1.50	149	3	0.30	1.4	1	0.15	14,44,91,104	6	1.20	1	27	4.05	27,900	32	4.80	8	3	0.30	12.30	1
Slovak Republic	1.3	32	4.80	927	18	1.80	5.3	23	4.05	54,46,771	34	6.80	2	12	1.80	33,100	26	3.90	6	10	1.00	24.15	34
Slovenia	1.0	39	5.85	1,105	20	2.00	4.7	27	3.45	20,70,050	39	7.80	2	12	1.80	34,500	25	3.75	5	14	1.40	26.05	39
South Africa	0.6	42	6.30	733	17	1.70	13.9	41	6.15	5,77,25,606	14	2.80	0	41	6.15	13,600	41	6.15	2	36	3.60	32.85	43
Spain	2.0	15	2.25	1,471	22	2.20	5.2	26	3.90	4,67,33,038	17	3.40	2	12	1.80	38,400	21	3.15	3	22	2.20	18.90	14
Sweden	1.5	25	3.75	4,248	35	3.50	7.9	33	4.95	1,01,75,214	27	5.40	1	27	4.05	51,200	8	1.20	2	36	3.60	26.45	40
Switzerland	3.1	1	0.15	6,904	41	4.10	8.5	34	5.10	85,13,227	31	6.20	1	27	4.05	62,100	4	0.60	5	14	1.40	21.60	26
Turkey	0.7	41	6.15	152	4	0.40	1.4	2	0.30	8,14,07,211	10	2.00	1	27	4.05	27,000	35	5.25	3	22	2.20	20.35	20
United Kingdom	1.6	24	3.60	5,113	38	3.80	12.7	40	6.00	6,64,35,550	12	2.40	1	1	0.15	44,200	16	2.40	3	22	2.20	24.45	36
United States	1.9	16	2.40	6,717	40	4.00	11.2	39	5.85	32,71,67,434	3	0.60	2	12	1.80	59,800	5	0.75	29	35	3.50	18.90	13





## 5. DEFINITIONS

Most definitions are from OECD library. Some are taken from IndexMundi.

1. **Insurance density** is calculated by measuring the ratio of gross direct premium incomes to the country's total population.<sup>1</sup>
2. **Insurance penetration** is used as an **indicator** of **insurance** sector development within a country and is calculated as the ratio of total **insurance** premiums to gross domestic product in a given year.<sup>2</sup>
3. **Health spending** measures the final consumption of health care goods and services (i.e. current health expenditure) including personal health care (curative care, rehabilitative care, long-term care, ancillary services and medical goods) and collective services (prevention and public health services as well as health administration), but excluding spending on investments. Health care is financed through a mix of financing arrangements including government spending and compulsory health insurance (“Government/compulsory”) as well as voluntary health insurance and private funds such as households’ out-of-pocket payments, NGOs and private corporations (“Voluntary”). This indicator is presented as a total and by type of financing (“Government/compulsory”, “Voluntary”, “**Out-of-pocket**”) and is measured as a share of GDP, as a share of total health spending and in USD per capita (using economy-wide PPPs).<sup>3</sup>
4. **Hospital Beds / 1000:** This entry provides the number of hospital beds per 1,000 people; it serves as a general measure of inpatient service availability. Hospital beds include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation

centers. In most cases, beds for both acute and chronic care are included.<sup>4</sup>

5. **Population:** This entry gives an estimate from the US Bureau of the Census based on statistics from population censuses, vital statistics registration systems, or sample surveys pertaining to the recent past and on assumptions about future trends. The total population presents one overall measure of the potential impact of the country on the world and within its region.<sup>5</sup>
6. **GDP Per Capita PPP:** This entry shows GDP on a purchasing power parity basis divided by population as of 1 July for the same year.<sup>6</sup>
7. **GDP Real Growth:** This entry gives GDP growth on an annual basis adjusted for inflation and expressed as a percent. The growth rates are year-over-year, and not compounded.<sup>7</sup>

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<sup>1</sup>“Largest emerging markets worldwide in 2019, by insurance density”, *Statista* Research Department, August 31, 2019, <https://www.statista.com/statistics/276068/insurance-penetration-in-selected-emerging-countries-worldwide/> ("Largest Emerging Markets Worldwide in 2019, by Insurance Density" 2019) ("Life and Non-Life Insurance Penetration in Select Countries Worldwide, 2019" 2020) ("Health Spending" 2019) ("Field Listing: Hospital Bed Density" 2019) ("Field Listing: Population" 2019) ("Historical Graphs per Year" n.d.) ("Historical Graphs Per Year" n.d.)

<sup>2</sup>“Life and Non-Life Insurance Penetration In Selected Countries Worldwide in 2019”, *Statista* Research Department, October 20, 2020, <https://www.statista.com/statistics/381174/insurance-penetration-in-selected-countries-worldwide/>

<sup>3</sup>“Health Spending”, *OECD* data, 2019, <https://data.oecd.org/healthres/health-spending.htm>

<sup>4</sup>“Field Listing—Hospital Bed Density”, *The World Factbook*, <https://www.cia.gov/the-world-factbook/field/hospital-bed-density/>

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