

Message from Mr. Ashvin Parekh



APAS is glad to present the knowledge report for the 11th Global Insurance Summit organized by ASSOCHAM.

In the past few years, insurance and mutual funds have been playing an increasingly greater role in channelizing household savings. There has been a shift of household savings from physical assets to financial assets. Demonetisation has given a boost to this shift. Insurance is expected to continue channelizing savings in the future as well.

There is a huge potential for growth of the insurance sector due to demographic factors like growing middle class, rising disposable incomes, large young insurable population and greater awareness of the need for insurance coverage among the people.

The health of a country's insurance sector reflects its economy. The insurance sector plays a huge role in generating long term funds for infrastructure development. Thus, the growth of the insurance sector will contribute to the growth of the overall economy.

For developing the insurance industry, the government has a key role to play. There is a constant need for fiscal incentives and policy reforms by the government. There is a large population in the country, which cannot afford to have an insurance cover. The government should keep coming up with reforms to ensure cover for such people and increase insurance coverage. The government has already done a remarkable job by coming up with reforms like Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana

(PMSBY), Atal Pension Yojana (APY) and Pradhan Mantri Fasal Bima Yojana (PMFBY). These reforms have increased the insurance coverage in the country, which would contribute to the growth of the sector. The recently announced Ayushman Bharat – National Health Protection Mission (AB-NHPM) is another step in the same direction. Similar reforms are needed by the government on a regular basis to ensure growth of the industry.

The regulators also have a key role to play in developing the insurance industry. The regulators should continue to work along with the government to create a conducive environment for the insurance industry.

The theme for this year's event and the knowledge report is 'Increasing role of insurance for economic growth'. The report delves into the insurance industry and covers mainly three topics – life insurance, crop insurance and health insurance. The section on life insurance talks about its current scenario and the role played by it in mobilization of household savings. The section on crop insurance talks about crop insurance globally, its different schemes in India, with a particular focus on PMFBY, and their performance. The section on health insurance talks about its different schemes in India, with a particular focus on AB–NHPM.

This report and the event are a part of the continuous efforts taken by ASSOCHAM and APAS over the years to bring together the different stakeholders of the insurance industry to deliberate upon the key issues and the way forward, so that the discussions lead to some positive developments, from which the policy holders and the entire insurance industry could benefit.

As always, developing this knowledge report has been an enriching experience. I would like to thank the team from ASSOCHAM, led by Shri Chandan Kumar, for their continued support. I would also like to thank my colleagues – Sujana Hari, Harsh Mirpuri, Ankita Narnaware, Kalpesh Mantri and Rishank Dabra – for assisting me in developing this report.

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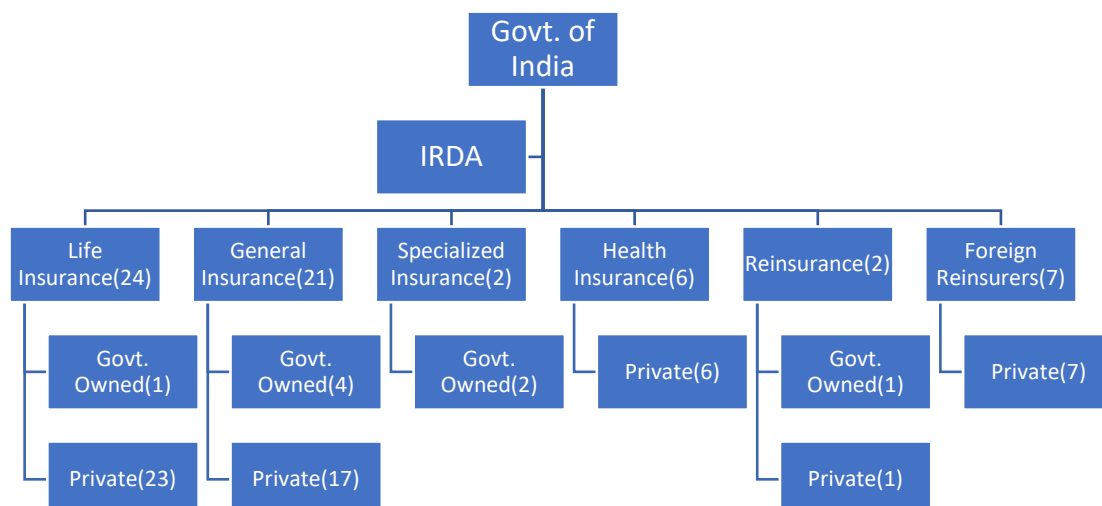
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Indian Insurance Industry Overview



Introduction

The Indian Insurance Industry has 62 insurance companies which are segregated below-



In the life insurance segment, Life Insurance Corporation (LIC) is the only public sector company. In the non-life insurance segment, there are seven public sector insurers including the individual national re-insurer- General Insurance Corporation of India (GIC Re). Additionally, there are other participants in Indian Insurance market including agents (individual and corporate), brokers, surveyors and third-party administrators servicing health insurance claims.

Life insurance is the largest segment of the life insurance market in India, accounting for 76.5% of the market's total value. India accounts for 6.1% of the Asia-Pacific life insurance market value.

Market Size and Performance

The Indian insurance industry is expected to grow to US\$ 280 billion by FY2020. The growth drivers for this include the solid economic growth and higher personal disposable incomes in the country. Overall insurance penetration in India reached 3.7 per cent in 2017 from 2.71 per cent in 2001. Gross premium in Indian insurance industry increased from INR 3.2 trillion (US\$ 49 billion) in FY12 to reach close to INR 5 trillion (US\$72 billion) in FY18.

The regulator's and government push towards insurance sector has helped in increasing the penetration of insurance in the country and increase in spread of insurance schemes. Along with that, Demographic factors such as growing middle class, young population and growing awareness and education towards the need for protection and retirement planning will enable the growth of Indian life insurance. Moreover, the industry has been stimulated by product innovation, vibrant distribution channels, coupled with targeted publicity and promotional campaigns by the insurers. Private sector companies hold close to 48 per cent market share in the general insurance segment and around 29 per cent market share in the life insurance segment.

The domestic life insurance industry registered 11 % year-on-year growth for new business premium in 2017-18, generating a revenue of US\$ 30 billion. The premiums for non-life insurance industry increased by 17.5 % year-on-year in FY18.

In Q1 FY19, premium from new life insurance business increased around 10.78 per cent year-on-year to INR 367.30 billion (US\$ 5.48 billion). Gross direct premiums of non-life insurers in India reached INR 1.5 trillion (US\$ 23.38 billion) in FY18. In April-May 2018, the gross direct premiums of non-life insurers reached close to INR 25,000 crore (US\$ 3.79 billion), showing a year-on-year growth rate of about 12 per cent.

Going forward, increasing life expectancy, favourable savings and greater employment in the private sector is expected to fuel demand for pension plans. Similarly, sustainable growth in the automotive industry over the next decade would be a key driver for the motor insurance market.

Investments

Insurance sector is witnessing a boom in terms of investment inflows and the key trends can be observed as shown below-

- In 2017, insurance sector in India saw 10 (M&A) deals worth approximately US\$ 900 million.
- Insurance sector in India raised around INR 435 billion (US\$ 7 billion) through public issues in 2017.
- To build a robust insurance distribution network in India, Bombay Stock Exchange (BSE) will set up a joint venture with Ebix Inc through a new distribution exchange platform.

Government Initiatives

The Government of India has taken a number of initiatives to boost the insurance industry. Some of them are as follows:

- Government has approved the ordinance to increase Foreign Direct Investment (FDI) limit in Insurance sector from 26 per cent to 49 per cent which would further help attract investments in the sector.
- IRDAI has allowed insurers investments up to 10 per cent in additional tier 1 (AT1) bonds that are issued by banks to increase their tier 1 capital, to enable expansion of the pool of eligible investors for the banks.
- The IRDAI is planning to issue redesigned initial public offering (IPO) guidelines for insurance companies in India, which are looking to divest equity through the IPO.
- National Health Protection Scheme has been launched under Ayushman Bharat to provide coverage of up to INR 5 lakhs to more than 10 crore vulnerable families.
- Over 48 million famers were benefitted under Pradhan Mantri Fasal Bima Yojana- the crop insurance scheme in 2017-18.

Channel Partners Growth Scenario

Individual Agents

The agency channel was the key growth driver for the sector until 2008. However, declining commission structures on some products, extremely high attrition (at both agent and front-line sales manager level) and difficult customer acquisition, individual agent's feasibility has led to a problematic situation. There is a declining sense in career attractiveness as an agent, which is contributing to the decline in channel's growth, as recruiting the right talent is becoming increasingly tough. Due to these adverse conditions, most agency-led insurers, are seeing a drastic decline in new business volumes. Consequently, the number of offices in the private space has gone down significantly from a high of 8,785 in March 2009 to 6,193 in March 2014.

Bancassurance

Bancassurance has been the major channel performing favourably as compared to other channels experiencing adverse challenges. A strong captive customer base, banks' strong

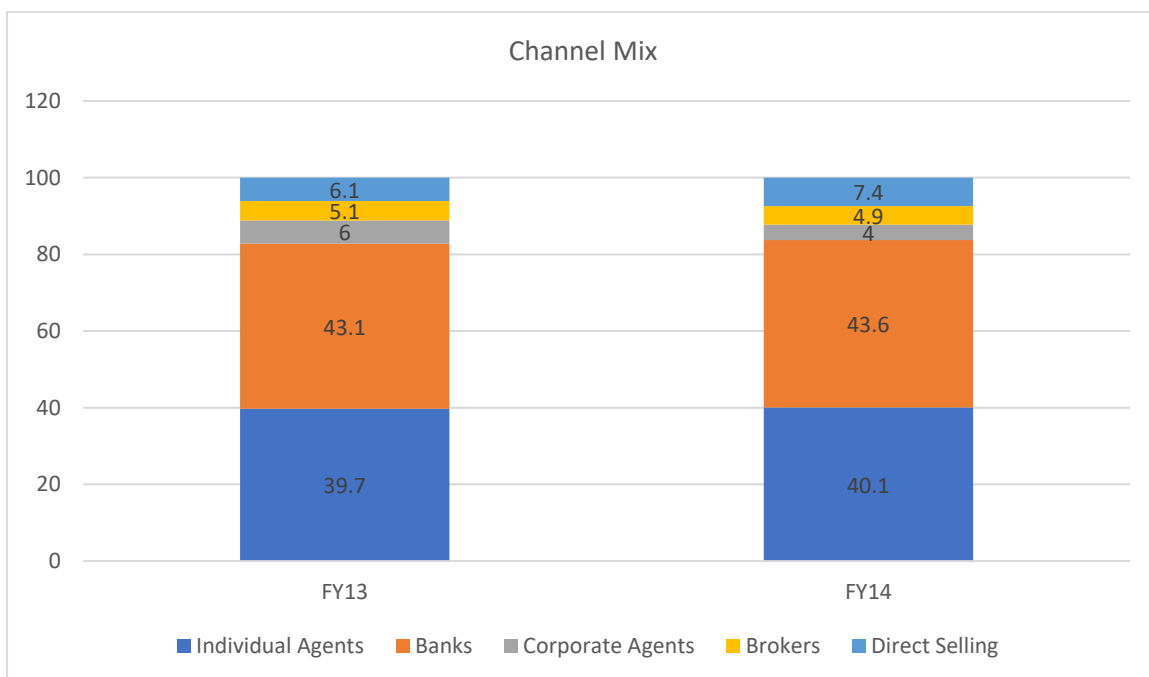
brand equity, cross selling insurance with other banking products and a rapidly enhancing bank branch network has allowed private banks to scale up their insurance distribution.

Brokers

For both life and non-life segments, Insurance broking is a significant channel in developed markets. This channel is seen as an advisory model in the developed world. However, the highly fragmented in India has constricted the growth of this channel. Furthermore, brokers are unable to offer a diverse range of services to the customers and fail to customize offerings.

Corporate Agents

Corporate agents have been witnessing the biggest decline in recent years among the major channels. Till 5 years up to FY14, the individual new business written by corporate agents dropped by more than 79%. The causes behind this have been -Declining interest from insurance companies on account of unviable terms from the established corporate agents - Excessive regulatory restrictions in the corporate agency space to ensure level of sales quality -Very low quality business (particularly low persistency) written by fringe corporate agents, thereby leading to a lack of participation by insurers.





Life Insurance Industry:

Mobilization of Household Savings

Current Scenario

The Indian life insurance market has overall witnessed phenomenal growth trajectory in recent years, and this positive outlook looks set to prevail in the upcoming years as well, though the growth rate might be slower.

The medium-term outlook for the life insurance industry remains robust, with solid premium growth forecast over the next five years to 2023. The industry is well developed, but there is a lot to cover in terms of density and penetration. The Primary growth drivers of life insurance growth are the demographic advantages that India possess such as rising incomes, improving life expectancy and a growing pool of middle-class consumers. The life insurance players are enhancing their distribution channels along with that there is increasing education and awareness among people of life and savings schemes which will act as a good omen for the industry. The fact that India is hit by natural disasters such as floods and earthquakes on a rather frequent basis also helps to increase the popularity of life insurance.

India's life insurance sector is one of the largest markets in the Asia Pacific region, and possesses enormous and sustainable long-term growth potential. India has a huge population of more than 1.3bn (estimated in 2018), but the density (premiums per capita) remains low at just less than INR 3500 per capita in 2018. So, this signifies that despite the high volume of total premiums written, there are significant gaps in coverage and penetration. Some of the key challenges present in the market include foreign ownership restriction present for the foreign investors, though there has been a gradual easing in these restrictions over the recent years. The leader of the life insurance market is the state-owned LIC, and it for more than 75% of the total life premiums written. However, smaller players and private sector players have started gaining ground this sector. In the long run, it can be expected that the foreign insurance players would enter the market through local partnerships and bring their pool of knowledge and specialization to the India's life insurance sector. This will yield benefits to the sector in the long run and will spread awareness of the benefits of the life insurance cover among the consumers.

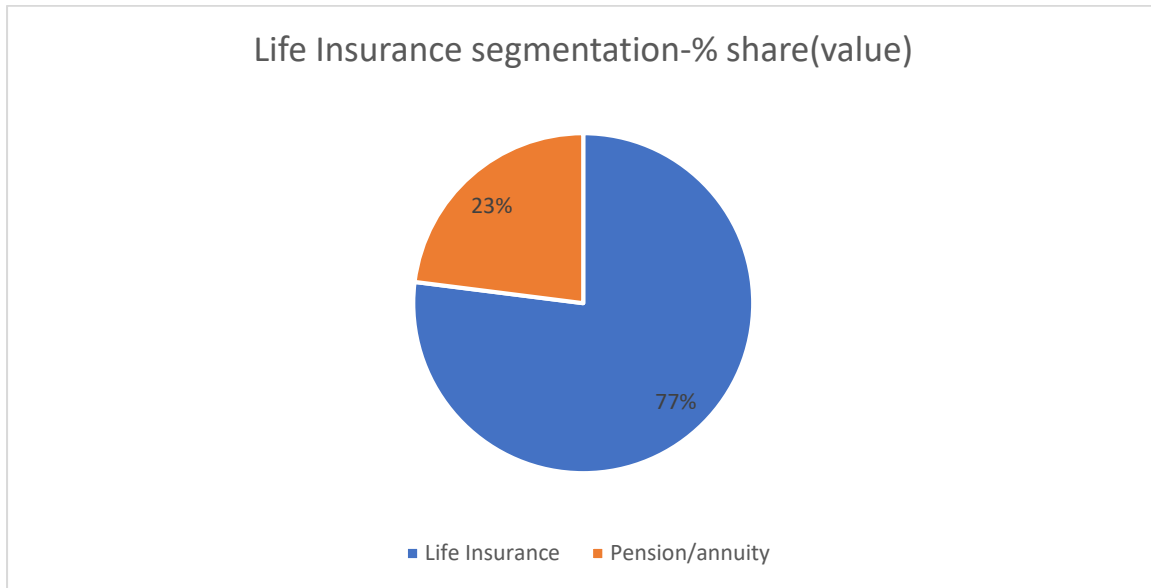
Key Highlights

- Overall insurance penetration (premiums as % of GDP) in India has increased from 2.7% to 3.7% in 2017 in a span of around 15 years.
- The life insurance sector registered around 11% year-on-year growth for new business premiums in 2017-18, generating a revenue of close to INR 2 trillion (US\$ 30 billion).
- In life insurance segment, private players had a market share of 32.68 per cent in new business in FY19 (up to June 2018).
- At 3.7%, India was ranked 41st in 2017 in terms of insurance penetration with life insurance penetration 2.76% and non-life insurance penetration at 0.94%.
- In terms of insurance density India was ranked 73rd in 2017 with overall density at US\$55.
- FY2017/18 results suggest that life insurers did exceptionally well with SBI Life, ICICI Prudential and HDFC Life all demonstrating strong performance steadily rising premiums and healthy growth in terms of new customer acquisition.
- Key growth drivers of life insurance are rising disposable income, increasing demand for savings, longer life expectancies and burgeoning national middle class, with increased awareness of products and services.
- The uptick in life insurance will also be steered by promotion of innovative products through new channels such as low-cost micro-policies and mobile phone-linked distribution methods through aggressive carriers.
- There is some stagnation witnessed in the life insurance sector recently in the aftermath of Indian government's demonetization policy and GST, which has especially hurt the working and middle class of the country as they are the most reliant on cash for their everyday transactions.
- Moreover, a study conducted by Aon Hewitt found that the average increase in annual wages declined in India from 15.1% growth in 2007 to 10.2% in 2017.
- Although the burgeoning Indian middle class in addition to the low current penetration levels means that growth overall will remain healthy over the long period, but declining wage levels will affect the growth.

Market Segmentation

Life insurance is the largest segment of the life insurance market in India, accounting for 76.5% of the market's total value. The Pension/ annuity segment accounts for the remaining 23.5% of the market.

Given below is the segmentation share value between Life Insurance and Pension/annuity business in India-

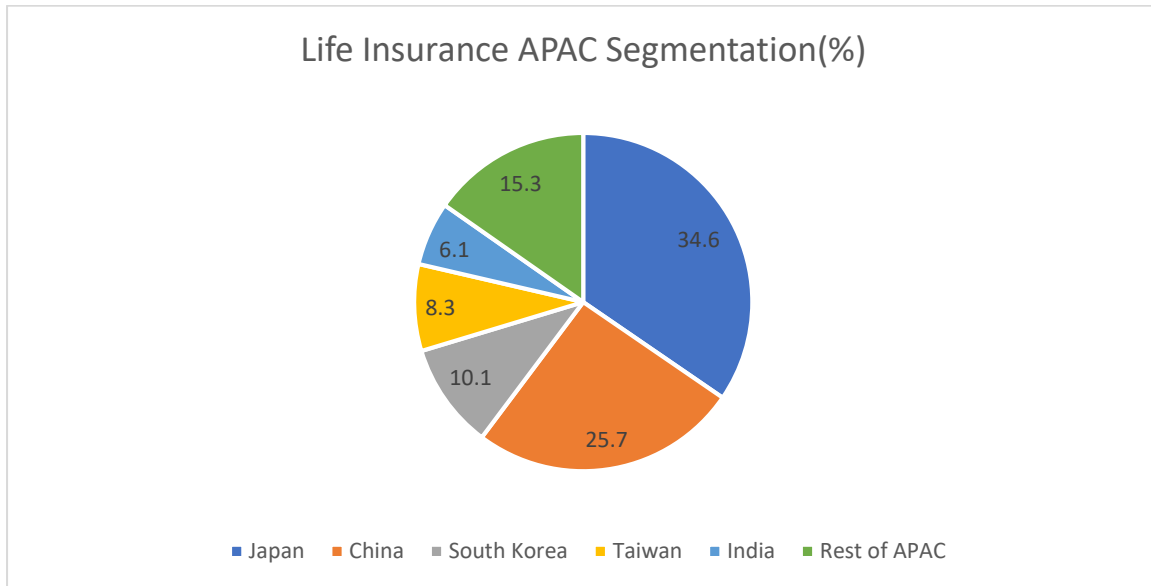


Geography Segmentation

India accounts for 6.1% of the Asia-Pacific life insurance market value. Japan accounts for a further 34.6% of the Asia-Pacific market.

Given below is the life insurance market geography segmentation in APAC region.

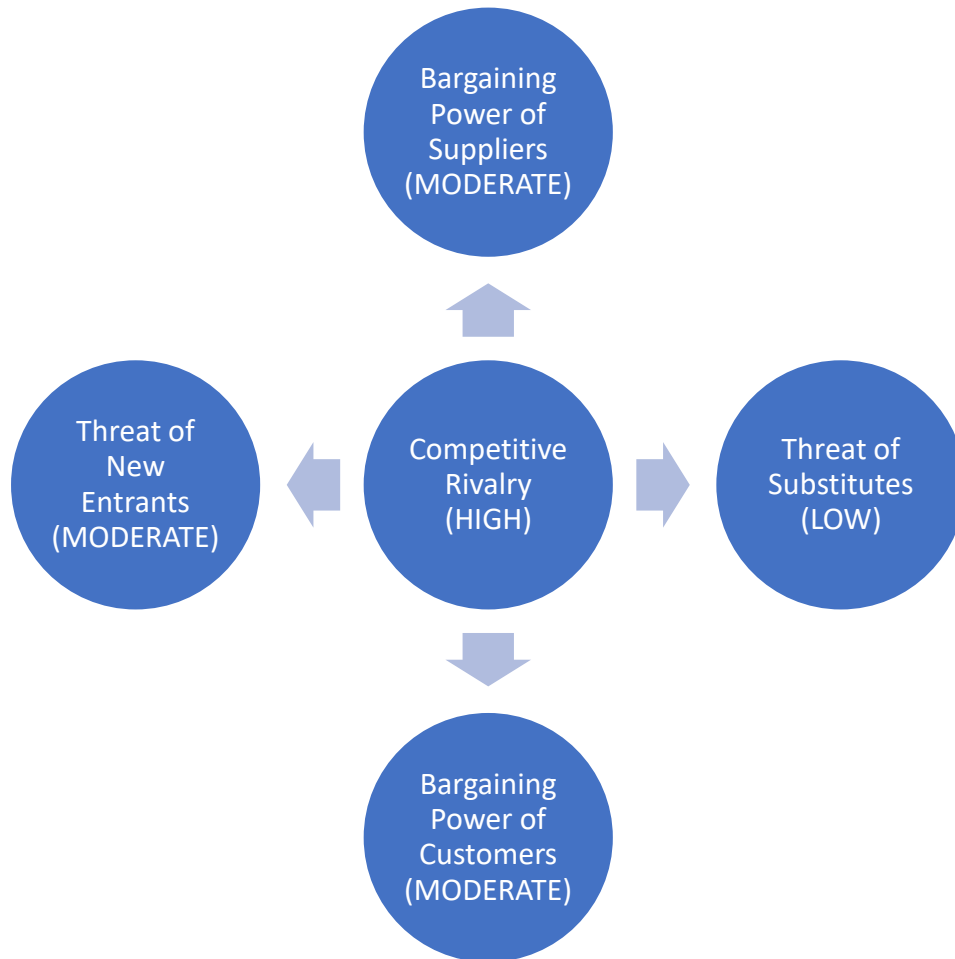
India life Insurance APAC segmentation by the amount of business generated



Porter’s Five Forces Analysis

We have used the Porter’s Five Forces Analysis framework to understand the attractiveness of the Life Insurance Industry. The insurance companies have been taken as players. The key buyers have been taken as consumers (both individual as well as corporate), and Information and communications technology manufacturers, software houses and reinsurance companies are the key suppliers.

Porter’s Five Forces



Competitive Rivalry within the Indian life insurance market is high because there is a presence of many medium to large sized incumbents in the market and there are high exit barriers for the current players.

Bargaining power of customers is moderate overall as the customers can switch between different players with relative ease but at the same time most customers cannot become players themselves by doing backward integration.

The threat of new entrants is also moderate because relatively significant growth in the recent years and future growth potential is attracting new players to enter the market and utilize this. Because of the expertise and capital required for the investment and the savings and

investments being among the other methods of insuring one's self, substitutes as a force governing this market is low.

Similarly, suppliers or distributors in the life insurance sector also have a moderate power, as many suppliers have a large scale and it is difficult to go forward integration for the suppliers and distributors as the skills, specialities and expertise in the life insurance market is tough to replicate for them as compared to the life insurance players. The life insurance demand is driven by various factors such as the GDP growth, average length of life expectancy in the economy, inflation and interest rates and their expectations in the future. Moreover, in the emerging economies like India, the presence of foreign investors and inflows, the market structure and the dissemination of the financial education are also some important factors that govern the development of this sector.

Bargaining Power of Buyers

There are several reasons why people go for a life insurance policy and some of the prominent ones include securing the future of dependents in case of death or a major illness of the earning member of the family. Also, it can act as an outcome of sound financial planning and investment as it creates value at the end of the maturity period, as in that case it is not paid out as a death benefit.

Moreover, the life insurance policy infuses a sense of savings discipline for the customers as the customers consider paying the premiums in the back of their mind when they have to make their expenditure plans. Also, many companies also provide the life insurance cover to their employees which is also termed as Corporate owned life insurance plan. This is usually provisioned to key employees of the company as it hedges these companies against the risk of the recruiting and training them and fulfilling their corporate obligations in case of the unexpected death of these key employees.

Individual customers have a marginal buying and bargaining powers when compared to corporate customers since the nature and importance of the product offered creates less sense of loss to the insurance companies in case of individual customers. On the other hand, the corporate clients by the sheer nature of their large scale have a high priority for the

insurance companies because they generate a large chunk of revenue for them in premiums and losing them can adversely affect the financials of the insurance companies.

Furthermore, the customer stickiness is low in this sector as the customers are able to scan and shop for the best deal offered to them due to the presence of large number of players present in the market. Additionally, the presence of web aggregators like Policybazaar which has enabled easy comparison for the customers and the increasing influx of the social media blogging that might positively or negatively impact a brand's equity this has allowed the customers strength for going after the best insurance policy providers that fulfil and matches their insurance needs.

However, the customers power is weakened in the sense of the switching costs that they have to incur while going for a new insurance policy as during the switching of the policy company the customer has to surrender its policy at a lower price than the maturity value and also incur huge tax on it. On top of that they might have to miss out on some returns on a market linked plan as they might incur some expense load for that

Though if we have to judge the Buyer power overall in the market it is moderate.

Bargaining Power of Suppliers

In the life insurance sector, the suppliers to the insurance companies include the Information and Communications Technology manufacturers and software houses. Insurance companies today, use unique range of products and services and therefore required tailormade software solutions and services. Underwriters have to use latest technologies including cloud computing and data analytics solutions to better manage the risks of the clients and the company.

The systems today are linked enterprise wide and therefore have a lot of complexity that require expertise in software solutions. The bargaining power of suppliers is enhanced due to the cutting-edge technological services offered to the clients. A secure and reliable ICT

infrastructure is essential, and companies are often reliant on one supplier. The companies which provide such type of solutions include TCS, Infosys, Wipro, IBM, Accenture etc. Such suppliers may have their own unique and patented systems. Since these are licensed and patented systems, this makes it difficult for insurance companies to switch to other suppliers as migration to new systems is a strenuous exercise and require change management and dedication of lot of resources in terms of time and money. Furthermore, it disrupts the business for a considerable amount of time and hence this emboldens the supplier bargaining power.

It is difficult for insurance companies to go for backward integration with their suppliers because the acquisition of these big companies requires a lot of funding and capital and these IT companies also are not willing to integrate with the insurance company as they don't want to concentrate their business.

In addition to the IT companies, Life insurance companies also require the engagement with the reinsurance companies to cover their own risk exposures. Many such reinsurers are large players with a global presence such as Munich Re, Swiss Reinsurance Company Ltd or Hannover Re increasing supplier power.

Some companies such as Chubb Limited offer both life insurance as well as reinsurance activities. Many of the suppliers have become global giants as a result of the consolidation in the reinsurance sector and as a result they have increased their power. For instance, the acquisition of XL Group of the Catlin signifies the consolidation. Further consolidation is likely to strengthen the position of suppliers. Overall, the supplier power is moderate in the life insurance market.

Threat of New Entrants

In the life insurance sector, the barriers to entry are often low, however, there is key decision that needs to be taken whether to enter on a large scale or small scale as there are costs and benefits associated with it. The opportunity to enter the market on a small scale boosts the threat of new entrants. Entry into the market for well-developed insurance companies is

capital intensive and players need to ensure some level of integration if market entry is to be a success. Existing players in the market have a strong brand equity and loyalty and they offer a suite of services that might make it hard for new entrants to compete with.

The threat for the new entrants is present in the insurance industry in the form that perpetual business from the customers is difficult to achieve since the customers either opt not to pursue the policy or change the insurance policy very rarely. This means that the underwriting of new policies is vital and access to distribution networks is a key criterion for successful market entry.

The growth in the insurance space has been driven by the demographic dividend the country possesses and also the increasing wage levels, but the penetration level is still a way to go with it being at 3.7% so the potential is still there.

The threat of new entrants is impacted by the fact that the LIC still holds more than 70% of the insurance market and the existence of such a huge state-owned entity with a dominant position in the market leads to a situation in which it makes it troublesome for new entrant to compete with LIC and other private players in the market.

Few companies are creating the niche of their own by the way they are underwriting insurance. There is a fear of consolidation in the sense of acquisition of smaller players by the larger players. Another threat for many insurance companies is other financial services companies entering the market. There are some instances in which commercial and investment banks have started offering insurance products offering as a value-added products or services along with loans and mortgages. So, the new entrants' threat can be classified as moderate.

Threat of substitutes

A number of alternatives exist for insurance products in the form of financial products such as savings and investments. Savings and investments include deposits, mutual funds and direct investments in equities and bonds. After death, wills are also a way of protecting risk

for family members. These options are cheaper and convenient as compared to life insurance, but they do not act as a protection gear in the same way as life insurance does.

Consumers have a way of following and using self-insurance mode of risk management approach whereby they can set aside a certain amount of money for future uncertainties and risks. Similarly, an organization can also follow the same approach for hedging its risks and pursuing risk management by setting up an inhouse insurance unit within itself and safeguard itself.

Unlike Motor insurance, life insurance is not an essential product in India but in the developed countries the consumers have themselves started classifying the life insurance as an essential purchase. Hence the penetration rate of life insurance in the OECD nations as of 2015 stood at 4.8%, whereas in the less mature markets of the Asia-Pacific region and Africa, penetration rates in countries such as Indonesia and Nigeria hover around or under the 1% mark. In India, however the penetration rate is still around 3.7% which indicates that there is a lot of room to cover for the life insurance players in the Indian market.

Increasing consumer disposable income in India along with the disaster-prone situation in the country which includes floods and earthquakes makes it likely that the life insurance penetration is likely to increase in the upcoming years. The threat of substitutes therefore in the life insurance industry is weak overall.

Competitive rivalry

LIC controls the majority of the market in India with it holding more than 70% of the market share in India in the life insurance segment. The existence of such a huge state-owned entity with a dominant position in the market has led to an increased rivalry in the market as the existing players have to compete for a smaller pie of the market and has to snatch the business away from LIC which is more or less sticky.

Though the stable and rapid growth in the Indian life insurance sector has caused some less of rivalry as the aggressive steps might not have to be taken by the existing players to maintain their market share.

In the life insurance market, the services offered by different players are similar but some of them are diversified which leads to easing of rivalry to a certain extent. The leading players are large companies offering similar life products, although there are a number of different plans, including temporary, permanent and various subclasses. Life Insurance is increasingly becoming a commodity because of the similarity in the nature of the leading players in the market as the companies with greater efficiency, excellent customer service and low costs is likely to beat the rivals.

Exit barriers are higher as compared to the entry barriers though they are not insignificant. Like, the regulations such as capital adequacy requirements for the insurers makes it difficult for them to exit the market as it will become problematic for policyholders. When exit barriers in a market are high, players may weather poor market conditions where necessary, which tends to boost rivalry. Insurance companies also use higher investment returns and a variety of insurance investment products to try to lure in customers. This leads to greater consolidation within the market. It is preferred by larger players to acquire the competitors and go for consolidation rather than increasing their marketing and advertising spends to penetrate the market. Overall, the rivalry in the Indian market is moderate.

Indian Economy attributes leading to growth

Booming Investments

- Insurance sector companies in India raised around INR 435 billion (US\$ 7 billion) through public issues in 2017.
- Government's approval to Increase in FDI limit to 49 per cent from 26 per cent, will further fuel inflows

Favourable Regulations

- Tax incentives on insurance products are likely to attract customers
- Insurance Bill passed recently has also given IRDA the leeway to frame regulations
- Clarity on rules for insurance IPOs would infuse liquidity in the industry
- There have been perpetual attempts by the government and the regulator to make the sector more lucrative for foreign participants

Opportunistic Environment

- There is likely to be a rapid growth for micro insurance, especially from rural areas
- Life insurance penetration is likely to increase in the low-income urban areas

Demand Driven Economy

- There is likely to be Increase in demand for insurance offshoring
- The growth in the use of internet and media has also started increasing demand
- New age products and distribution channels along with growing interest in insurance is likely to fuel growth

Rapidly growing life insurance market

Life Insurance Premiums

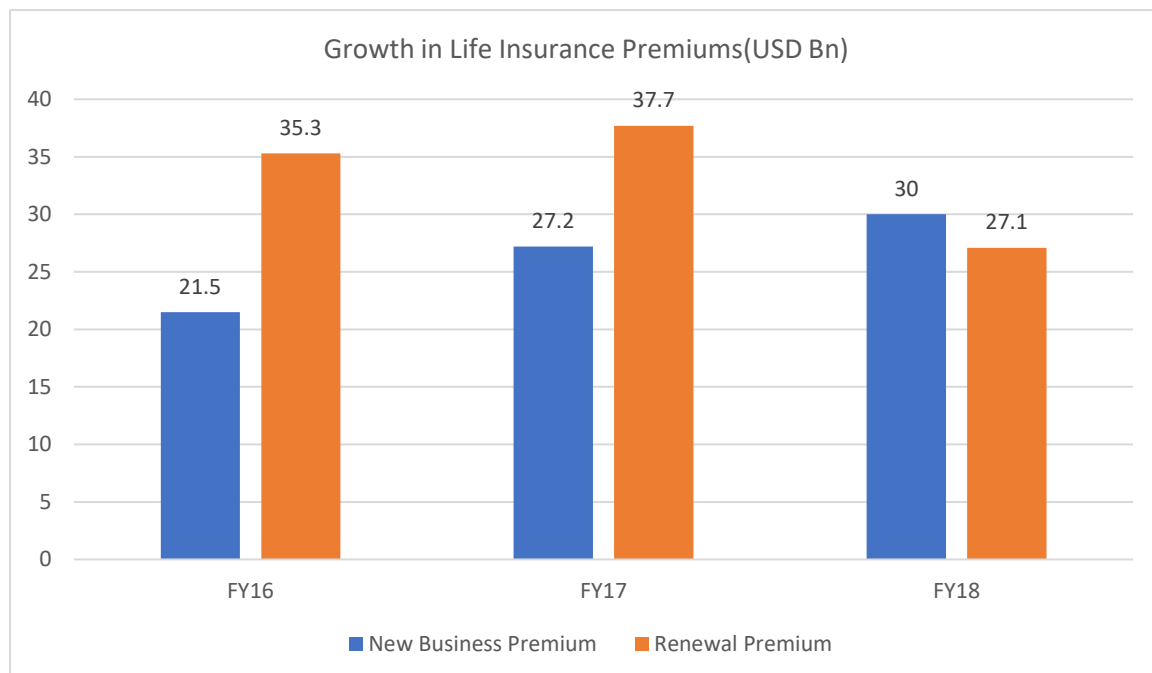
Increase in the affluence and status of the consumers is likely to support the growth of the life insurance sector. Along with other Financial products which have their own attributes certain set of consumers have become aware that this asset class is also attractive and important as it offers a protection against future risks and uncertainties. However, a large

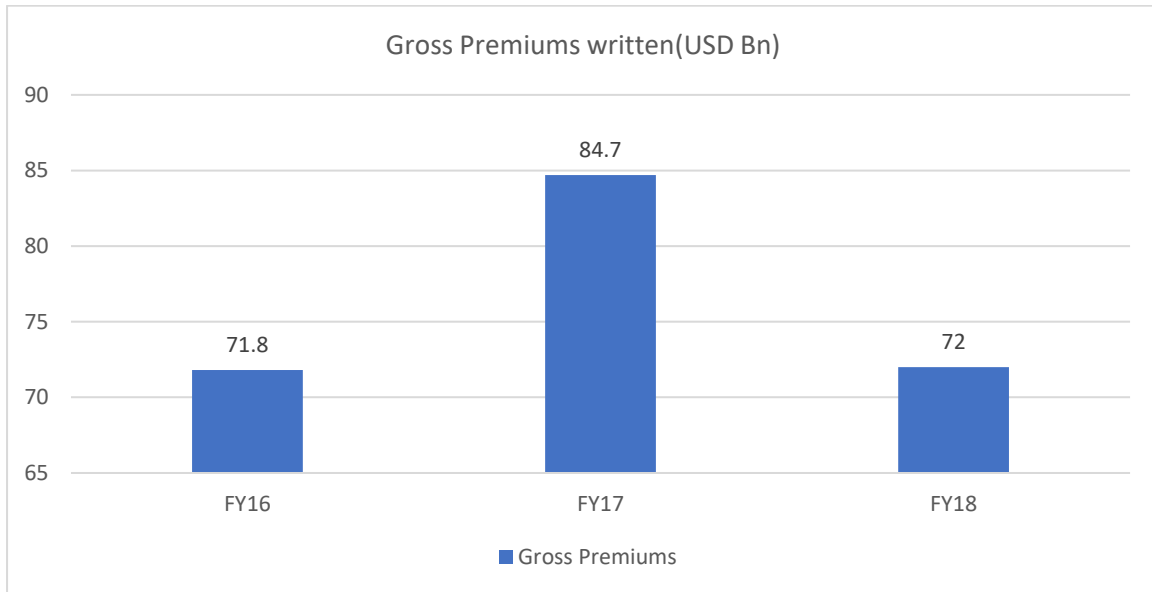
share of the population is still excluded from the market (due to cultural barriers, lack of access or limited affordability), resulting in a low-density rate of just INR 3500 per capita. Inspire of this, the higher employment rates and household incomes will further stimulate the growth in this sector.

Government initiatives like those of enhancing the financial inclusion in this sector to increase the number of people who have basic insurance cover from 20% to 40-50% is also commendable in this regard.

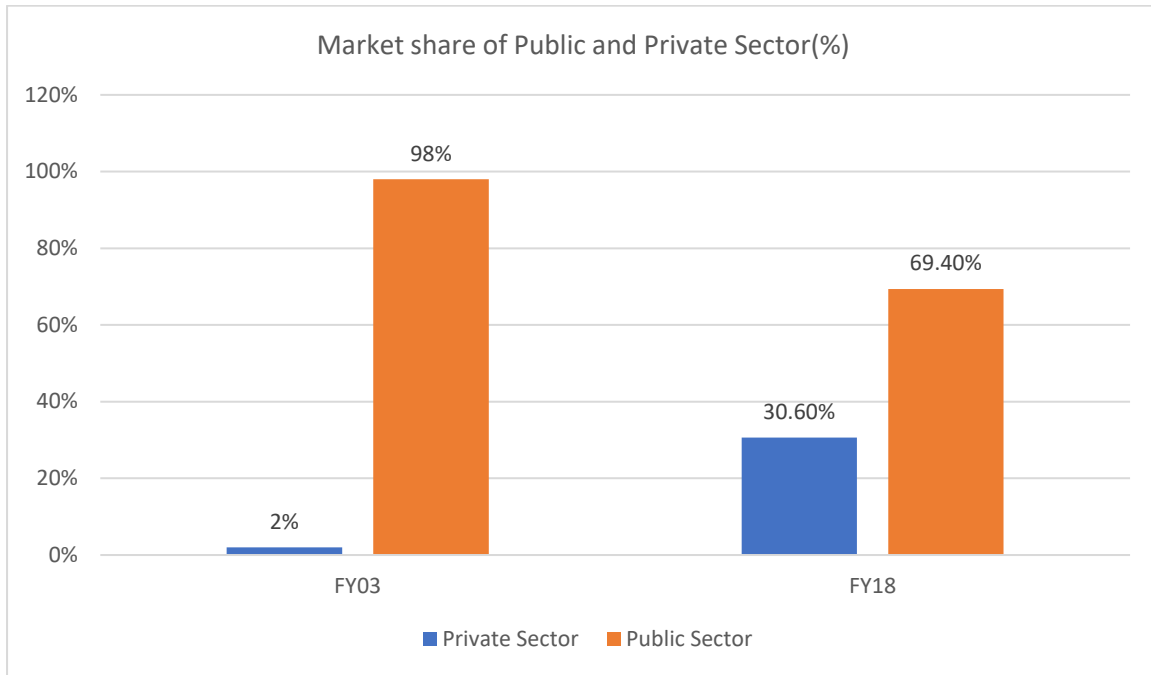
Looking at some of the key stats in this sector as shown below-

- Gross premium collected by life insurance companies in India reached INR 3.7 trillion (US\$ 58 billion) in FY18 (up to December 2017).
- Over FY12–18, premium from new business of life insurance companies in India have increased at a 15% CAGR to reach INR 1.94 trillion (US\$ 30 billion).
- In Q1 FY19, premium from new life insurance business increased 10.8% year-on-year to INR 368 billion (US\$ 5.5 billion).





Over the years, share of private sector in life insurance segment has grown from around 2 per cent in FY03 to 30.6 per cent in FY18.



- Life insurance claims growth had rapidly grown in local currency terms in 2012 and 2013, though currency fluctuations mean that in USD terms, the growth was more or less gradual. Between 2008 and 2013, claims in the segment rose from USD14bn to USD37bn. This growth was, however, followed by a fall in claims in 2014 by 14% to USD32bn. By 2016, claims were up by a steady 9.1% in INR, whereas they grew by 4% in US dollar terms. The growth can be attributed to a steady rise in premiums as the number of policies grew robustly during this period. However, the point to be noted is that during the end of 2016, the life sector’s gross loss ratio had declined to 53%.
- These figures indicate that underwriting and risk management procedures have improved in the Indian life industry. Moving forward, we would expect to see further, albeit more normalised, growth in claims as the life sector grows and matures. However, the life insurance frauds are increasing in the country so sustaining the procedures and growth is a case of importance.

Competitive Dynamics

As stated earlier as well, India's life insurance market is dominated by the state-owned **Life Insurance Corporation of India (LIC)**, with a market share of 71.8%, and 23 private sector companies with a combined market share of around 28.2%. This makes it very difficult for new entrants to enter and compete in the Indian market as LIC, as a state-owned entity, enjoys a distinct advantage over all other private players looking to compete with it. Its dominance is hard to break in the Indian life insurance market as the consumers are usually sticky in holding of their life insurance policies. However, there is a strong rivalry within the Indian life insurance market remains because of the high exit barriers and many medium and large sized players. LIC is likely to expand its footprint and sustain its growth in the market despite holding INR 27 trn of assets under management as it is likely to take a controlling 51% stake in the troubled IDBI Bank, a move that has been approved by the Insurance Regulatory and Development Authority of India (IRDAI) in order to overturn the requirement that insurance companies cannot own more than a 15% stake in a bank. The acquisition has prompted fears that policy holders' funds are being used to bail out a debt-ridden bank with a high level of nonperforming assets. Frequently, LIC has helped the Indian cause by investing in the government owned enterprises and has prompted prevention of failing IPOs in the Indian market. Poor asset quality and the political use of funds to bail out poorly performing state-owned enterprises raises concerns that LIC's ability to honour claims is being eroded. This weakness could prompt growth in private sector insurers that have invested more strategically and wisely.

The private sector life insurance market is relatively fragmented but still the players have been showing aggression and raising capital through IPOs. In this instance, due to the fragmented nature among the private sector insurers, only three companies hold a share greater than 4% (the first two are local firms with significant foreign partners). In theory, the market is open to a 49% joint venture approved by the government of India, but in reality, the dominance of state-owned LIC represents a significant barrier to entry. The two largest After LIC, the largest insurance firms are ICICI Prudential, a JV between ICICI Bank (74%) and Prudential plc (26%). ICICI Prudential has the largest market share in the private life segment of close to 6%, with it having the annual life premiums of around USD4bn. However, with the intensely increasing competition witnessed in the last 5-10 years its market share has declined from 7% in 2008 to 4% in 2014, though it increased again in the last 3-4 years.

HDFC Standard Life and SBI Life have gained market share in the sector at the cost of ICICI Prudential. SBI Life with premiums of close to USD3.5bn and a market share of 5% has emerged as the third largest life insurer in India. As such, SBI eclipsed HDFC Standard for the third position in 2016. HDFC Standard had seen its share remain largely steady at 4.5-5% over the 2014-2018 period. HDFC Standard life is a Joint Venture between HDFC Ltd of India and Standard Life plc. Due to the large customer base of its banking channel, HDFC has been able to leverage itself to increase its sales and distribution of life insurance related products to its customers.

The financial performance of the leading life insurers in India has also witnessed a steady improvement. Private sector players such as ICICI Prudential, HDFC and SBI Life have all seen their financials improve steadily as they have actively solicited new business, expanded their sales and distribution channels and investing significantly in the acquisition of new business. During 2017, HDFC Standard Life and SBI Life both went for their initial public offerings (IPOs), as they have been successful in raising huge capital as other insurance players are also likely to take the plunge. HDFC standard life and SBI life had raised close to USD1.3bn in their IPOs and they were highly oversubscribed during the sale process as there was a huge organic demand for their shares.

It is crucial that the banking sector distribution channel is utilized properly by the private sector insurance players to compete effectively with the brand equity of LIC. Furthermore, given the growth in savings, pension and investment policies, access to banking channels provides a critical means of reaching the client base. Another big private sector player in the market, SBI Life is a joint venture between State Bank of India (74%) and BNP Paribas Assurance (26%). SBI life has also seen decent growth in the past few years due to the distinct competitive and brand advantage it enjoys in the banking sector.

Max Life Insurance is another large private sector player in the industry and it has got the tag of being the fourth largest private sector company, Max Life, is a Joint Venture between Max Limited -India and Mitsui Insurance- Japan. Max Life Insurance market share has grown its market share from 1.7% to close to 3% over last 2-3 years by focusing on long-term savings and retirement solutions. It has aggressively focused on bancassurance through its partnership with Axis Bank of India, whilst simultaneously pushing its products through

partnerships and agency-based models. Max Life and HDFC Standard Life had proposed for a merger in August 2016 HDFC with approval from the boards of both the companies. This kicked off a three-stage process of transactions, which would have listed on the stock market as the biggest private player in India's life insurance market, behind only state-owned LIC. But, IRDA had given some reservations about the deal, and there were difficulties in getting the regulatory approval for both the companies. Finally, both of them had to call of the merger in 2017, after regulatory approval was not given. Max Life is still pursuing other inorganic options of growth with it in talks with Birla Sunlife over a proposed M&A deal.

Bajaj Allianz has lost its market share to the growth of the four large private sector insurers. As it has lost market share from 5% to close 2% in the last 10 years. Furthermore, Birla Sunlife and Aviva India have both witnessed their shares dwindle from 2.1% and 0.9% to 1% and 0.5% in last 10 years respectively. These illustrations give us an understanding how banking channel is extremely critical for the distribution of insurance products as it is available with the four largest private sector insurers. ICICI Prudential and HDFC Standard's growth in endowment policies, ULIPs and pension funds is vastly superior as compared to Aviva, Bajaj Allianz or Birla Sun Life.

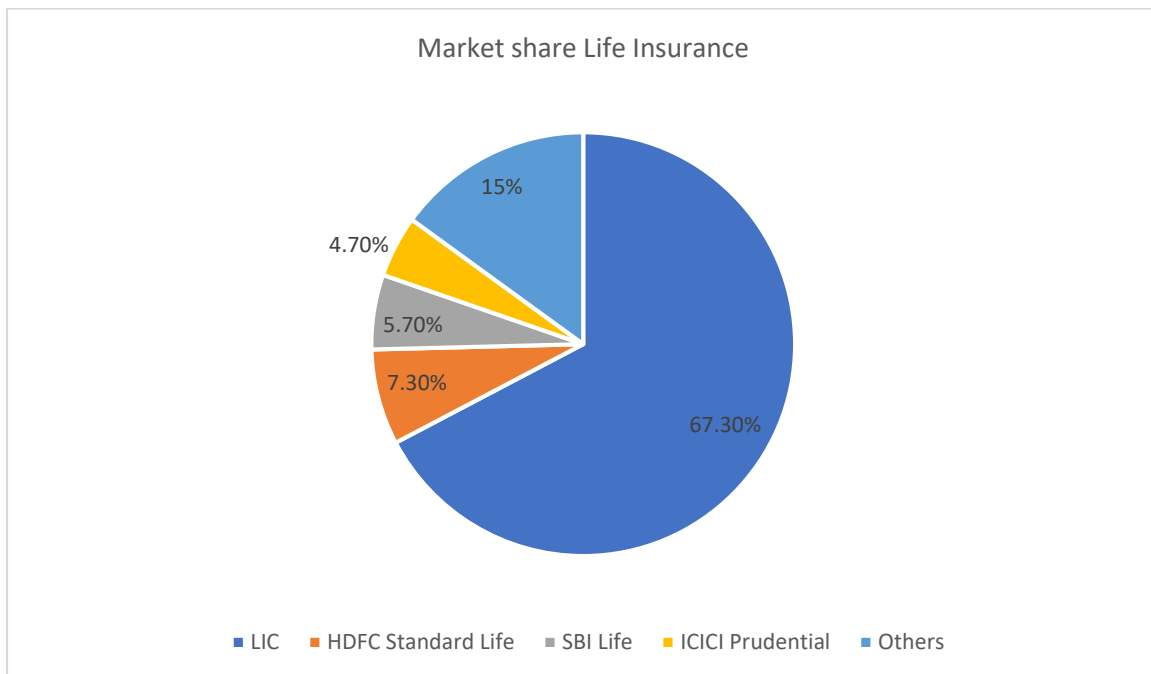
Banking relationships and the dominant position that LIC holds in this industry are some deterrents to the success in the life insurance industry. We nevertheless believe that the life insurance sector of India will see further foreign entrants compete or, at least, raise their ownership stakes in the JVs since the ruling change in 2015. UK's largest insurer, AVIVA, currently holds a 26% stake in Aviva India, along with Dabur Invest Corporation of India.

AVIVA is also keen to raise its stake to 49% as it seeks to utilize the growth potential of the life insurance market. HDFC is also selling 9% stake in HDFC standard to its JV partner Standard PLC.

New Entrants like Canara HSBC are doing decently in the life insurance market having generated close to 350Mn USD in a span of 10 years. Given the new legislation, we expect some new entrants in the market, but we believe that many foreign entities that were previously holding a 26% JV stake will look to boost it further. The recent strong

growth in life premiums in the world's largest democracy makes for an attractive proposition. BNP Paribas Assurance is already in talks to boost its stake in lucrative SBI, given the prowess and growth of the JV. However, in the current context for the companies with a market share less than 25% face challenging situation to counter LIC which has a strong brand name, customer loyalty and vast distribution network in the life insurance market. LIC, being a state-owned corporation, caters largely to the modest income families and individuals. Private insurers will find it difficult to take a large share from LIC and therefore they will rather expand by expanding the market size rather than snatching LIC's market share significantly.

Over the last 17 years, number of life insurance players in the sector has increased from 4 to 23. With a 67.3 per cent share new business market share in April-June 2018, Life Insurance Corporation of India, the only public sector life insurer in the country, continues to be the market leader. HDFC Standard Life Insurance with a market share of 7.3% In in new business premium in April-June 2018 is a leading player in the private sector which is followed by SBI Life Insurance at 5.7% and ICICI Prudential Life Insurance at 4.7%.



Key Notable Trends

Life Insurance sector has seen a good activity in terms of companies raising the capital from the market and strengthening their positions. The initial public offerings for both HDFC Standard Life and SBI Life in 2017 demonstrated great investor enthusiasm in the life insurance market. Also, the ongoing sale of Max Life continues to overshadow the life insurance market with a number of investors showing great enthusiasm towards the future prospects of the company and the industry.

There are three main types of life insurances available in India. First, there is a term life insurance that insures the policy holder for a sum in the event of death. Second, there are the very popular unit linked insurance policies (ULIP) that offer the benefits of investment savings fused with the benefits of a term life insurance that offer a lump sum in the event of death. ULIP premiums garner a higher rate of return because of the fact they are linked to the market risks as they invest in equity and debt asset classes. Thirdly, IRDA now regulates the pension policies of pensioners and retirees. Pensions have a key attribute that it enables the individual to receive a fixed income after retirement based on the period of investment, retirement age and monthly premium.

Innovation in the industry

- ULIPs has been one of the most innovative products in the industry as it has enabled the investor to have a protection as well as use it as a mode of investment
- It has also been witnessed that several other traditional products have also been customised to meet specific needs of Indian consumers

New Distribution Channels Emergence

- Emerging distribution channels like online distribution, NBFCs and bancassurance have enabled the reach towards masses and led to declining costs
- Local NGO s have also been tied up with to reach lucrative rural markets
- In April 2017, IRDAI started a web portal – isnp.irda.gov.in – that will allow the insurers to sell and register policies online. This portal is open to intermediaries in insurance business as well.

- India Post Payments Bank (IPPB) is also planning to tie up with insurance companies and mutual funds to sell -several financial products including insurance, but it will be a non-exclusive tie up and hence will be a mutually beneficial proposition for the insurance companies and the bank alike. Several domestic and foreign players have shown massive interest in partnering with the bank to gain access to the large customer base of the bank.

Private sector market share growth

In past few years, it has been observed that the private sector insurers have grown handsomely as we can see that in the past 15 years the share has increased from around 2% to 32.6% in early 2018.

Increasing focus on Embedded Value

Major insurance players have realigned their objectives towards cost rationalization and optimization to enhance embedded value to take a long-term view rather than focussing on the profits that show a short-term view.

Industrywide Cost savings

IRDAI has made electronic insurance account compulsory to buy insurance policies since October 2016 for the customers which will enable the insurers to save a lot of costs.

Differentiation strategies

- The insurance providers have started providing products with differentiated features along a wide and expansive range of products and services. For example, New India Assurance launched Farmers' Package Insurance to covering farmer's house, assets, cattle etc. United India launched Workmen Medicare Policy to cover hospitalisation expenses arising out of accidents during and in the course of employment
- Last year in 2017, HDFC life and Haptik, the voice assistant services provider made a collaborative effort to showcase India's 1st life insurance chatbot HDFC Life in collaboration with Haptik, has announced the launch of the country's 1st life insurance

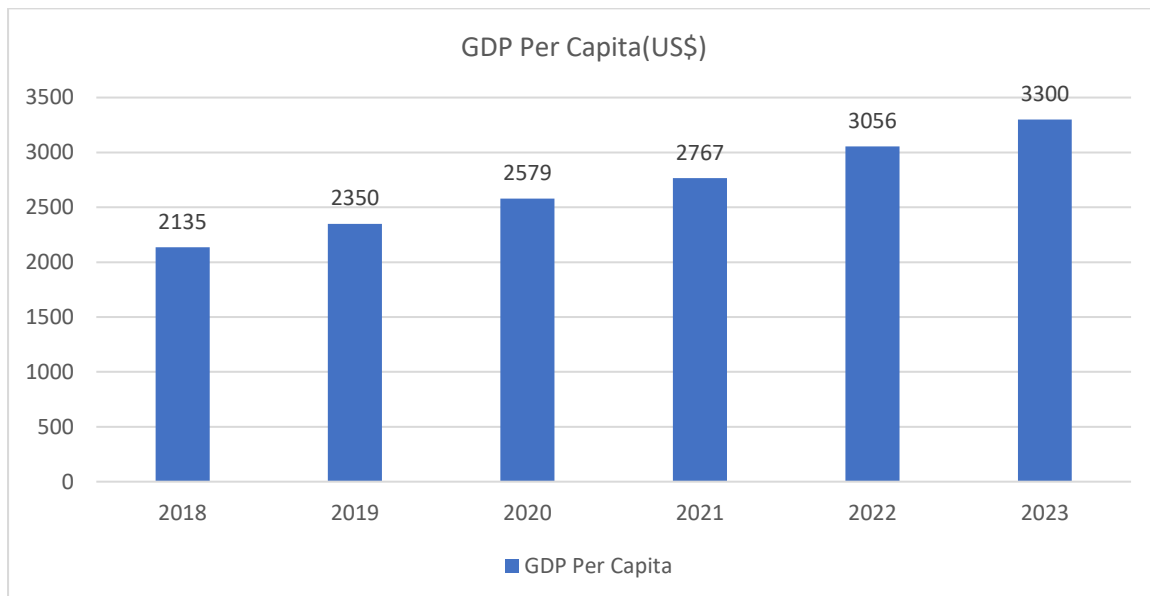
chatbot that will aid the customer to choose the different insurance products, plans and schemes as per their own needs and choices.

Niche

Nowadays, insurance companies are also creating a niche for themselves in providing the focussed products and services within the life insurance segment. For example, SBI is focussing on individual regular premium products as against single premium and group products

Insurance Growth Drivers

- India’s economic growth is expected to remain robust and sustained over the medium to long term window and that would create a ripple effect in the insurance sector in term of the number of insurance premiums written.
- Higher personal disposable incomes would result in higher household savings that will be channelled into different financial savings instruments like insurance and pension policies.
- Per capita GDP of India is expected to reach US\$ 3,300 in 2023 from US\$ 2,135 in 2018.



Intense Competition

- New entrants might be expected to enter the market, which will increase number of insurance providers having wide range sophisticated products with competitive pricing available for customers.
- Regulations which are conducive for growth of the industry.

Financial Services Growth

- Financial Services growth is likely to manifest into the insurance industry with increasing working population that will be having higher disposable income.
- Increasing awareness about financial products including insurance among the consumers is likely to increase in the medium to long term timeframe

Taxation benefits for consumers

- In 2015, Tax deduction under Health Insurance Scheme has been increased to US\$409.43 from US\$245.66 and for senior citizens tax deduction has been increased to US\$491.32
- Insurance products and services are covered under the exempt, exempt, exempt (EEE) method of taxation. This leads to an effective tax rate of 30% for the consumers on investments such as life insurance for each financial year.

Announcements for the insurance sector under Union Budget

The government has come up with a plan to merge three public sector insurance companies - National Insurance Co. Ltd, The Oriental Insurance Co. Ltd, and United India Insurance Co. Ltd and list the merged entity on stock exchange.

Public listing allowance for Life insurance companies

- IRDA has recently come up with a regulation that allows life insurance companies having completed more than 10 years of operations in the industry to raise capital through Initial Public Offerings (IPOs). However, Companies will be able to raise capital if they have embedded value of twice the paid-up equity capital
- Companies such as SBI Life along with Private sector Insurer HDFC Standard Life have already raised funds through IPO route.

Increase in FDI limit and revival package

FDI limit for insurance company has been raised from 26 per cent to 49 per cent, providing safeguard and ownership control to Indian owners while at the same time giving them the room of expansion through foreign investments option. Government has prepared the revival package to help companies get tax incentives, smoother product clearances, and ease in investment procedures.

Private Sector Investment boom

- Indian Insurance sector witnessed 10 M&A deals worth close to 900 Million USD IN 2017 alone.
- In May 2018, Amazon led a funding round of 12 Million USD for a digital insurance start-up Acko in India.
- In December 2017, IRDA allowed private equity investors to become promoters in unlisted insurance companies. The move is expected to enhance PE investments in the sector.
- Insurance Bill was passed in 2015 that proposed to increase the stake of foreign investors in the insurance industry to 49% and this is likely to attract foreign investors from all over the world to invest in this sector.

SWOT Analysis

Strengths

- The size of insurance industry is large and the life insurance premiums amount to around USD70bn.
- Domestic insurance companies have scale in global terms and they can therefore look to expand in other international markets as well
- The market is increasingly open to foreign competition, which will be attracted by premium growth.
- Life insurance is having a critical role and strength in attracting organized savings from Indian households as those households need protection for their life and long-term wealth.
- The huge size of the nation's population provides a massive potential consumer base and penetration to chase.

Weaknesses

- Awareness about insurance is low as more than 80% of the population does not understand and use it.
- Micro-insurance is still at an early stage of development.
- Claims have increased putting a pressure on profitability for the players. Also, there have been instances of fraud claims filed.

Opportunities

- The government's campaign to promote financial inclusion has resulted in strong demand for its basic personal accident and life insurance products.
- If the private sector is given access to LIC's agency network, which includes more than 50% of India's 2.2mn tied agents then it would promote collaborative growth.
- Sustainable and robust growth in GDP, household incomes and demand should stimulate premium growth across all sectors including insurance.
- Heightening spending powers and rising middle-class incomes will support the uptake in both life and non-life sectors.

Threats

- Increasing regulatory scrutiny and impositions could hurt market growth in the future.
- Investment returns might get impacted by volatility in financial markets.
- Barriers to foreign investment and ownership remain.
- Recent large-scale natural disasters have led to increase in claims.

Key Insights and data points for 2018

There has been a slowdown in the new business of India's life insurers as it can be witnessed from the March 2018 data. However, this moderation is on expected lines as it has been impacted by the following factors.

1. High base effect in Q4FY18, caused by high growth post-demonetization in the last quarter of FY17;
2. Extra holidays in Mar'18 compared with Mar'17; and
3. NPA- and fraud-related noises, which led to employee transfers and a temporary shift in focus away from cross-selling in the crucial March month.

However, FY18 has been a good year for domestic life insurers, with close to 20% Year on Year overall growth in Individual New Business Weighted Received Premium (RWRP or IRP); RWRP grew by close to 25% for private insurers and by around 14% for LIC.

RWRP growth has shown decline in Mar'18 as the Overall sector RWRP growth slumped to close to 7% Year on Year in Mar'18 from close to 23% Year on Year growth for Year to Date FY18 in Feb'18. During the same period, RWRP growth of private players dipped to 7.9% YoY from 28.1% YoY. Among the top private players, the slide in growth in Mar'18 was the sharpest for HDFC Life (-2.4% YoY). In contrast, growth picked up marginally for ICICI Prudential (17% YoY) after 3 quarters of decline; SBI Life and Bajaj Allianz also showed some signs of marginal-5%YoY growth.

The contribution of single premium in total premium income is higher for LIC at 73% as compared to 69% in Jan-18 while for private players it was 37% (compared with 27% in Jan-

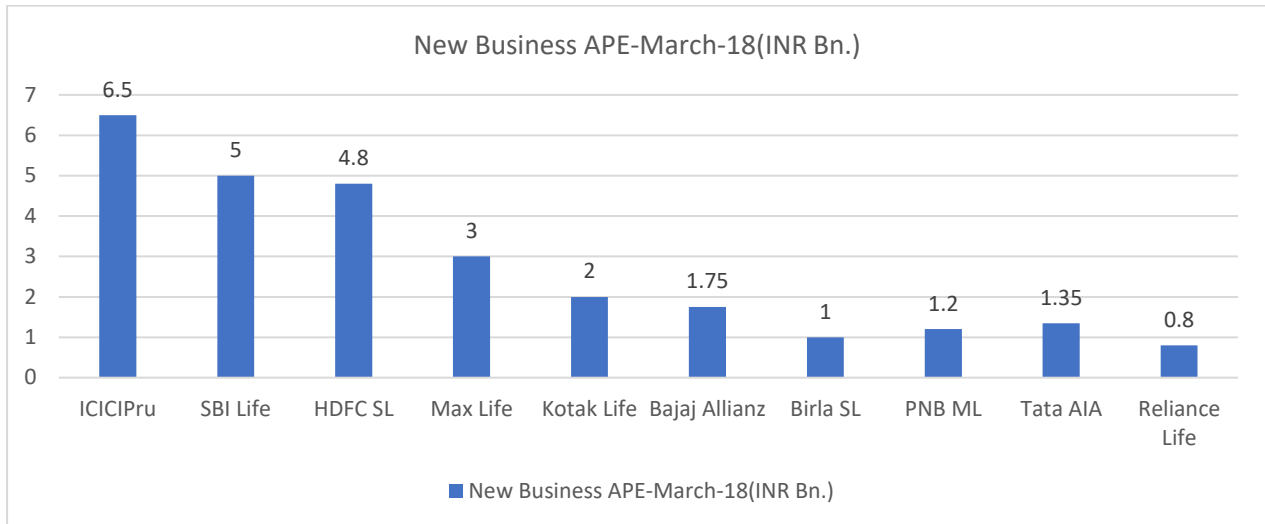
18. This impacted WRP-based market share for private players. On un-weighted basis, Private players market share stood at 38%. Average premium per policy has increased by 7% Year on Year for LIC whereas for private players it increased by 12%. Private players' composition in total policy volume declined only slightly from 25% in January 2018 to 24% in March 2018.

Group businesses remain robust

LIC has reported 32% Year on Year growth in group business but most of the private sector insurers have been declining as they have shown 13% decline in year on year growth except SBI Life and HDFC Standard Life who are growing strong in credit life and group term insurance. Individual APE growth has witnessed good growth as HDFC Standard Life, Max Life and Kotak Life also reported strong uptick. Individual business accounts for 95.6% of total APE for private players v/s 83% for LIC. in individual APE growth.

Private Players continue to show increase in Average Premiums per policy

While LIC's ULIP ticket size has shown declines as it is showing growth in low margin group business, average premium per policy has grown for private players as many players have been showing strong growth in high ticket size ULIPs. Private's share has decreased in total policy volumes at 24.3% from 28.5% in Dec-17.



Mutual fund AUM declines to INR 22.2t at 1% MoM but 24% growth YoY

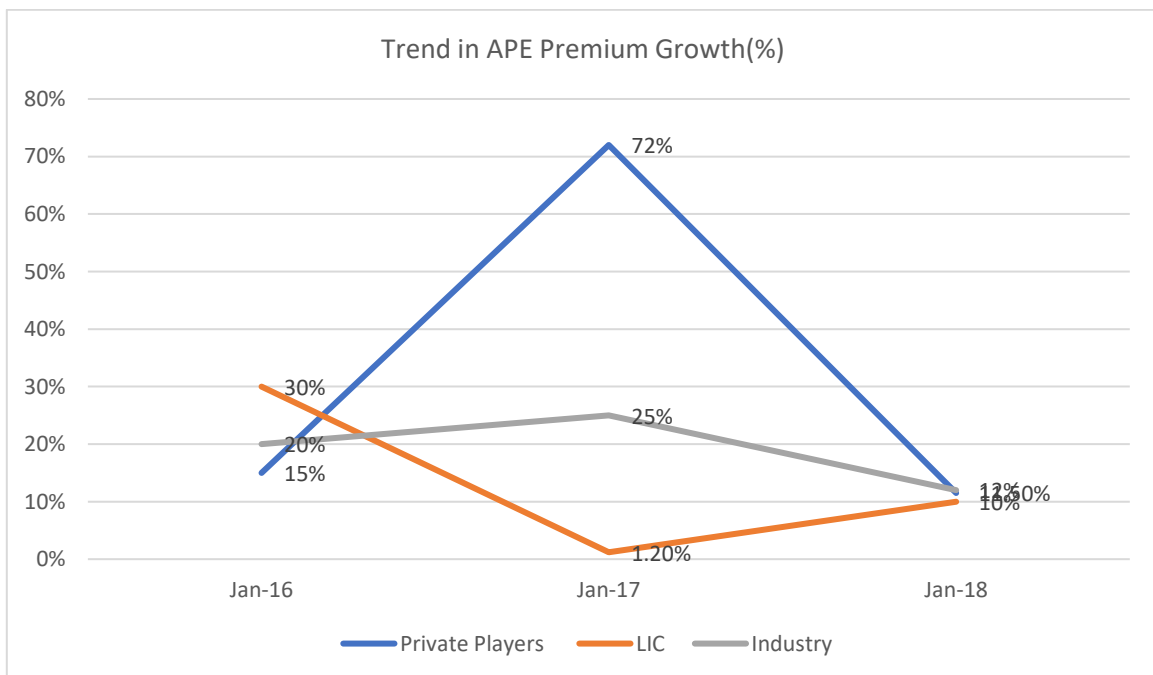
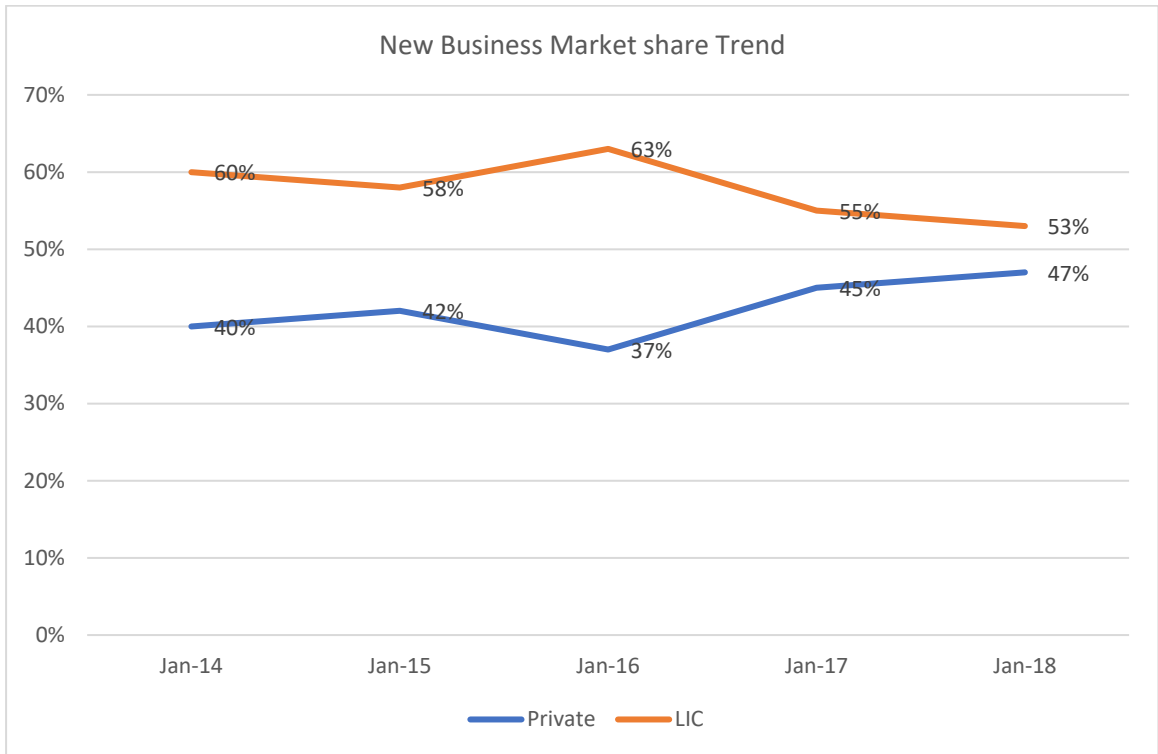
The Assets under Management of Mutual fund declined by 1% Month on Month in the month of March 2018 which is visible in 3.2% decline in ELSS funds and a decline of 13% in Gold ETF. Equity funds also reported modest trend and their composition in total AUM stands at 42% vs 34% last year. Overall industry AUM stood at INR22.2trillion, up 24% YoY.

There have been some factors that have led to this growth shape which include:

- Demonetization that led to increase in liquidity in last quarter of 2017 which led to high base effect and thereby led to high growth in life insurance new business. It is expected that growth would slow down in Q4FY18 once the base shifted to the post demonetization period.
- Compared with March 2017 there have been 2-3 extra holidays in Mar'18, which resulted in some loss of sales on the Individual side.
- Increased market volatility in Feb and March 2018, which also had some negative impact on the ULIP business (that typically sees strong sales in March).
- NPA related issues and some fraud-related noises with respect to the claims filed as well as the banking sector frauds along with the transfers of employees at some banks during March had led to problems in March 2018.

Conclusion

Medium and long-term outlook for the insurance Industry seems very strong due to the presence of strong fundamentals, growth drivers and the expected reforms by the regulator and the government. For India's life insurance industry: The moderation in new business growth notwithstanding, India's life insurance sector is expected to grow more than 15% CAGR in the medium term. The structural growth drivers (economic and demographic) are favourable for the entire financial services industry including the insurance and life insurance segment. Furthermore, it is expected there could be a structural and systemic shift in the market towards the private sector leading players due to their strong brand equity, goodwill, efficiency, structure, distribution channels and new and eccentric product offerings, which will help them in expanding their market share and challenge the incumbent LIC, which has dominant position in this sector.





Crop insurance

Introduction

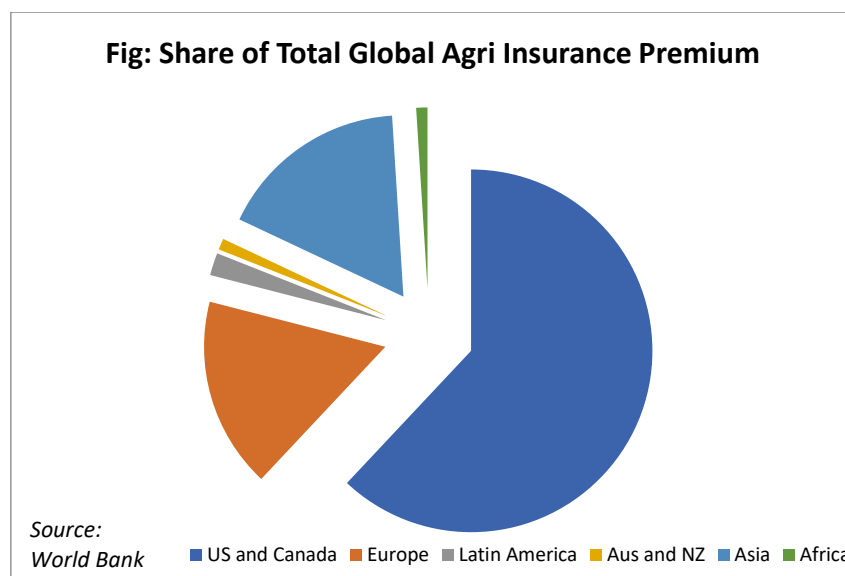
Agriculture has been increasingly considered as a business in the recent years. While agribusiness was almost forgotten within the world of agriculture, in recent times, farmers are being considered as entrepreneurs and agriculture a business. But then, if agriculture is a business, and if every business is subjected to the element of risk, farmers should have access to systematic and organised risk mitigation options. One of the effective risk mitigation tools that all business operations, from a small and medium entrepreneur to a Multinational Company, resort to, while mitigating unforeseen business risks, is insurance. A shopkeeper has got an access to various insurance schemes with clearly defined policies, premium and risk coverage. So does a Multinational Company.

Farmers in different countries across the globe too have access to insurance. However, the business risks associated with agricultural operations are quite unique. Agriculture is a business operation which faces both production and price risks at the same time. Very few other business operations face this phenomenon where production is at the mercy of vagaries of nature and price is at the mercy of elements beyond just demand and supply. Agriculture is also very peculiar in a way that unlike other business operations, agriculture operations

involve farmers buying agri inputs in retail amounts and selling his produce in bulk or wholesale. All these vulnerabilities, along with various bottlenecks within the system like inequality between rich and poor farmers in countries like India, remoteness of farming operations, difficulty in maintaining and ascertaining farming records, etc., make the business of Crop Insurance a difficult proposition.

Global crop insurance

Before focusing on the crop insurance situation in India, a quick look at the global crop insurance scenario and a brief discussion on crop insurance in some of the advanced nations can be worthwhile. Currently, the US and Canada together share the bulk of the global crop insurance premium at more than 60%. Europe and Asia each share almost 17% of the total premium. Australia and New Zealand, Latin American countries and the African Nations together share approximately 1%, 2% and 1% of the global premiums respectively. USA has by far one of the most structured crop insurance setup with institutions offering both revenue and income insurance. It has developed products like Crop Revenue Coverage (CRC), Revenue Assurance (RA) and Income Protection (IP), with CRC being the most popular one.



A snapshot of crop insurance programs across some major countries in the world is given in the following table:

Country	Crop Insurance Aspects
Germany	Crop insurance is voluntarily for German farmers
	There are no public subsidies for crop insurance. The farmers bear 100% of their crop insurance cost.
	Hail insurance products of numerous companies are the most preferred
USA	Only country currently where revenue and income insurance exist for agriculture operations for over 100 crops. Crop insurance is subsidized on an average 62% by the federal government.
	Offers some price risk protection in the form that the reference price is the future of the market
	More than 70% of the premiums collected in USA for crop insurance come from revenue insurance
	Insurance policies are sold and completely serviced through 18 approved private insurance companies
	In 2014, federal crop insurance policies covered 294 million acres
Canada	"Agri-Insurance" as it is called in Canada, is a provincially delivered program
	The federal government contributes a portion of total premiums and administrative costs to the provincial governments
	The federal government also provides a reinsurance arrangement (deficit financing) to provinces
China	China has become the 2nd largest agricultural insurance market in the world

	In general, organizations in China are promoting the weather index-based insurance (WII) and most of the agricultural insurance products are traditional products
	Reinsurance is available and most of the reinsurance treaties in the agricultural market are stop loss (SL) treaties
	Sum Insured is based on materialized costs of production, excluding labour costs
Japan	Crop Insurance in Japan involved compulsory participation for all the farmers and is subsidized by 50%
	Covers between planting to harvesting and compensation is given based on loss assessment
	Total premium paid together by the government and the farmers was about 24000 Yen in 2012

Crop insurance in India

The story of crop insurance in India goes long back and has had a chequered history. Crop insurance in general has not been so successful across the globe in different countries. Policy makers have unrolled various avatars of crop insurance in different times but notwithstanding the unique nature of Indian agriculture and inequitable socio-economic status of Indian farmers, crop insurance has remained a failed attempt in general. Even after repeated revision of the schemes and huge support in the form of premium subsidies for the farmers, crop insurance has failed to produce the desired results. Even after more than decades of existence of crop insurance in some form or the other, it has reached just a small percentage of the farmers.

The time line of different avatars of crop insurance in the country is provided in the following table:

Time Period	Crop Insurance Program/Scheme	Salient Features
1971-78	First individual Approach Scheme	Was introduced on a limited, ad-hoc and scattered scale
		General Insurance Corporation (GIC) of India introduced the scheme
		For cotton and later included groundnut, wheat and potato
		The scheme was implemented in Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Tamil Nadu and West Bengal
		3,110 farmers were covered for a premium of INR 4.54 lakh against claims of a massive INR 37.88 lakh
1979-84	Pilot Crop Insurance Scheme (PCIS)	Was based on the 'Area Approach' for providing insurance cover against a deficit in crop yield below the threshold level
		Rolled out by GIC and the scheme covered cereals, millets, oilseeds, cotton, potato and chickpeas
		Was restricted only to the loaned farmers of institutional sources on a voluntary basis
		Implemented in 12 states till 1984-85 and covered 6.23 lakh farmers
		Total premium collected was INR 195.01 lakh against claims of INR 155.68 lakh during the entire period
1985-99	Comprehensive Crop Insurance Scheme (CCIS)	Was the first nation-wide Crop Insurance Scheme
		Was linked to short-term credit and was based on the 'homogenous area approach'
		Scheme was adopted by 15 States and 2 Union Territories (UTs)
		It had covered 763 lakh farmers for a premium of INR 404 crore against claims of INR 2303 crore

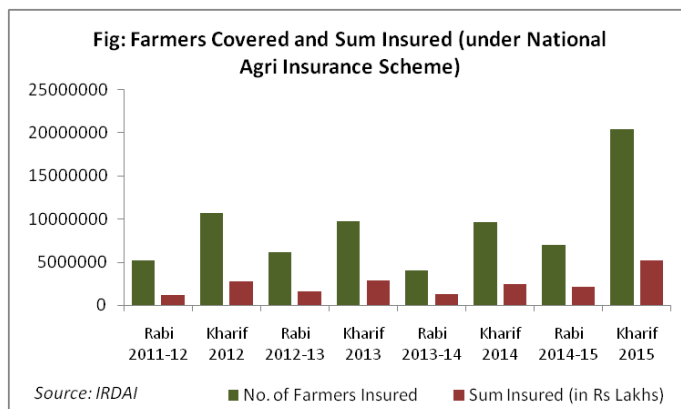
Rabi 1999- 2000 to Rabi 2013-14	National Agricultural Insurance Scheme (NAIS)	<p>Was aimed to protect the farmers against the crop losses suffered on account of natural calamities, such as drought, flood, hailstorm, cyclone, pests and diseases</p>
		<p>Was implemented by the Agriculture Insurance Company of India Ltd. (AIC)</p>
		<p>Available to all the farmers, both loaned and non-loaned, irrespective of their size of holding and covered all crops</p>
		<p>Implemented by 25 States and 2 Union Territories and covered 2084.78 lakh farmers</p>
		<p>Premium collected was INR 8,67,121 lakh against the claim of INR 25,37,558 lakh till 2012-13</p>
		<p>The total area insured was 3137.70 lakh hectares during the same till 2012-13</p>
Rabi 2010-11 season	Modified National Agricultural Insurance Scheme (MNAIS)	<p>Was implemented on pilot basis in 50 districts from Rabi 2010-11 season</p>
		<p>The scheme was thought to be easier and more farmer friendly</p>
		<p>It was implemented in 17 States and covered 45.80 lakh farmers</p>
		<p>Total premium collected was INR 1,08,800 lakh against the claim of INR 86,400 lakh until Rabi 2012-13</p>
2007-08	Weather Based Crop Insurance Scheme (WBCIS)	<p>Was launched in 20 States and was implemented by Agriculture Insurance Company of India along with some private companies</p>
		<p>The aim of the scheme was to settle the claims within shortest possible time</p>
		<p>WBCIS is based on actuarial rates of premium and premium actually charged from farmers has been restricted at par with NAIS</p>

		Was implemented in 18 States and 469.38 lakh farmers were covered
		Premium of INR 7,51,920 lakh was collected against the claims of INR 52,860 lakh under the Scheme from 2007-08 to 2012-13
2009-10	Coconut Palm Insurance Scheme (CPIS)	Was introduced on a pilot basis in the selected areas of Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Odisha and Tamil Nadu. Later on, it was extended to West Bengal.
		The pilot was implemented during the years 2011-12 and 2012-13 and continues to be under implementation
		It has been administered by the Coconut Development Board (CDB)
		50% of the premium is contributed by Government of India, 25% by the concerned State Government and the remaining 25% by the farmer
		51,108 farmers were covered for a premium of INR 167.69 lakh against the claims paid of INR 214.05 lakh till December 2013
2016	Pradhan Mantri Fasal Bima Yojana	Launched recently in 2016
		Has been discussed separately

Performance of the schemes

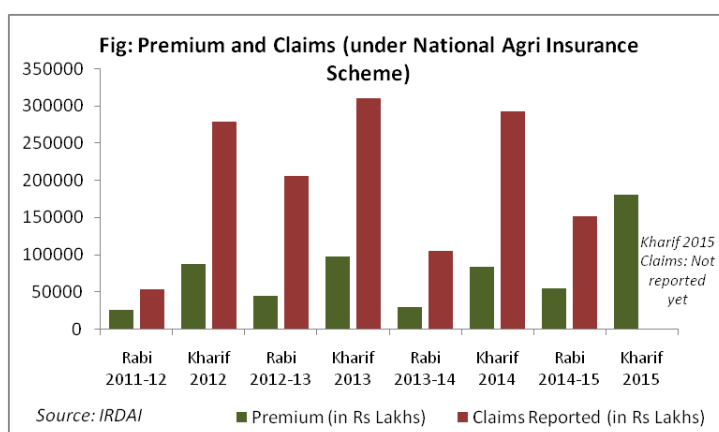
Indian Council of Food and Agriculture (ICFA) has prepared a report on crop insurance in India, with a study on the performances of various crop insurance schemes in India.

Under **National Agri Insurance Scheme**, during Rabi 2011-12, a total of 5.2 million farmers were covered with INR 11,28,394 lakhs of total sum insured. Except for Rabi season of 2013-14, the number of farmers covered by the scheme witnessed consistent growth and during Rabi 2014-15, a total of 7 million farmers were brought under the crop insurance scheme and the total sum insured during this season was INR 21,37,997 lakhs. The coverage of Kharif crops by the National Agri Insurance Scheme has exhibited rapid



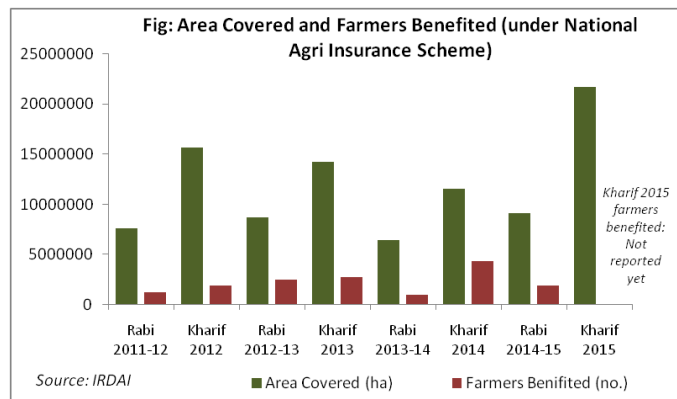
growth. During Kharif season of 2012, about 10.6 million farmers were covered with a total sum insured of INR 27,19,906 lakh. The number of farmers covered almost doubled to 20 million during kharif 2015 with INR 51,84,839 lakhs as the total sum insured. As per administrative approval from GOI, 10% subsidy is to be provided to small & marginal farmers in premium amount in Rabi-Summer, 2015-16 season, shared equally by State and Central Government.

Every year since the launch of National Agri Insurance Scheme, huge amounts of claims were made as losses caused to agricultural production by farmers. During Kharif season of 2014, INR 84,467 Lakhs was collected as premium and the total claims accumulated to INR 2,92,017 Lakhs during the same season. Similarly,



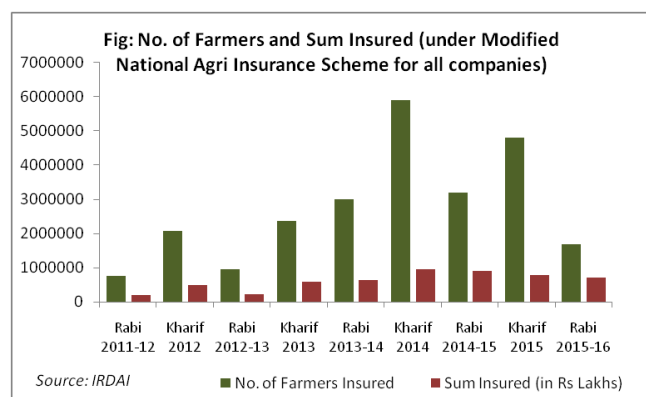
premium collected for Rabi 2014-15 season was INR 55,056 Lakhs and the total claims during the same season was a staggering INR 1,51,221 Lakhs.

When premium collected and total claims are compared to the number of farmers being covered and the area covered by National Agri Insurance Scheme, it reveals quite an interesting trend. The area covered under the scheme decreased from 1,56,93,701 ha



in Kharif 2012 to 1,15,47,758 ha in Kharif 2014, while the claims increased from a total of INR 2,78,579 lakhs in Kharif 2012 to INR 2,92,017 Lakhs in corresponding Kharif season of 2014. This indicates at several possibilities like severe weather failure during 2014 in general, severe weather failure in some pockets and can also include possibilities of corruption and fraud where there have been illegitimate claims.

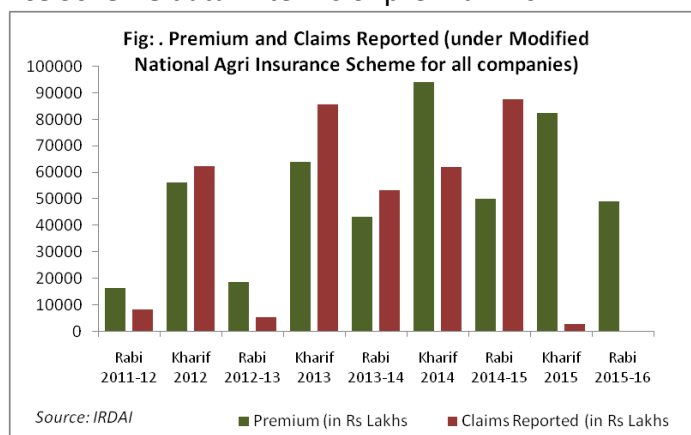
The study of figures about number of farmers covered and sum insured under the Modified National Insurance Scheme reveals that number of farmers opting for the scheme increased from 7,54,999 in Rabi 2011-12 to 16,81,820 in Rabi 2015-16. Concurrently, the sum insured increased



from INR 2,01,008 Lakhs in Rabi 2011-12 to INR 7,05,533 Lakhs in Rabi 2015-16. The highest increase was witnessed in Rabi 2014-15 when the number of farmers opting for the insurance scheme was 32,05,933 and sum insured was INR 9,10,882 Lakhs. The figures for kharif farmers showed a similar trend. From 20,62,445 farmers and INR 4,89,694 Lakhs during Kharif 2012, the numbers increased to 58,96,415 farmers and INR 9,48,118 Lakhs as sum insured in Kharif 2014. However, the figures fell to 48,09,164 farmers and INR 7,78,182 Lakhs as sum assured during the kharif season of 2015.

A study of the **Modified National Agri Insurance Scheme** data in terms of premium vs

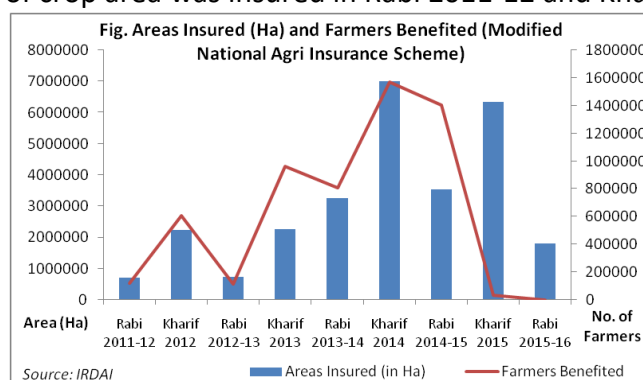
claims reported reveals that farmers are perhaps realising the benefit of agri insurance schemes and perhaps getting used to insurance, even if it means later that no crop loss or damage occurred due to any natural or biological disasters. In Rabi 2011-12, while the total premium collected was INR 16,520 Lakhs, the claims



made amounted to just INR 8,428 Lakhs. In a way, it could also indicate towards growing transparency in the system, as there have been reports of false claims being made on several occasions during the past. Similarly, during Rabi seasons of other years too, there have been claims with respect to the total premium being collected.

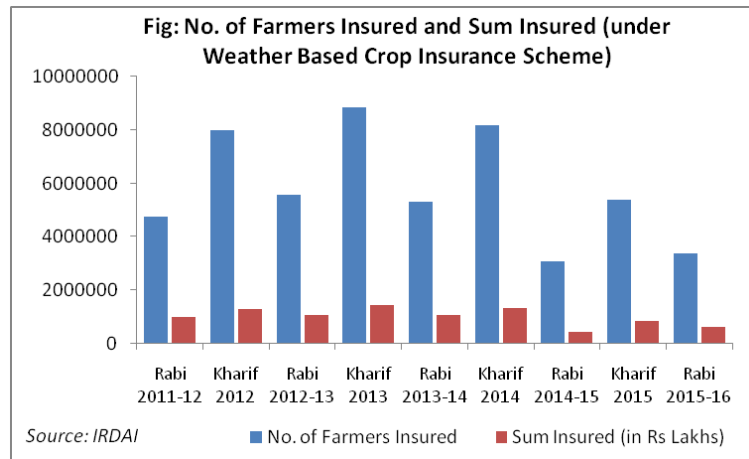
A total of 7,07,381 ha and 22,39,317 ha of crop area was insured in Rabi 2011-12 and Kharif

2012 seasons respectively under the Modified National Agri Insurance Scheme. The area under coverage of the scheme increased consistently for Kharif season till 2014, when the area covered was 70,00,041 ha. However, the Kharif area witnessed a decrease



in the following year at 63,48,392 ha. The Rabi area, on the other hand, increased consistently till 2014-15 to 35,53,445 ha before falling drastically to 18,09,394 ha during 2015-16. More than 7 lakh farmers were benefitted from the scheme, including both Rabi and Kharif, in 2013-14. While number of Kharif farmers who have benefitted from the scheme has always been higher when compared to the rabi season, 2014-15 was an exceptional one when perhaps due to extreme weather calamity, the number of claims was more from the Rabi season farmers than the Kharif season ones. In 2014-15, 14,06,569 farmers benefitted from the scheme while that for the Kharif season was a meagre 35,492 farmers.

Weather Based Crop Insurance, that was introduced in 2011-12 on a pilot basis with an aim to make it more convenient for the farmers to avail crop insurance, appeared to have received good response from the farmers. However, it is a matter of further study and investigation as to how many of

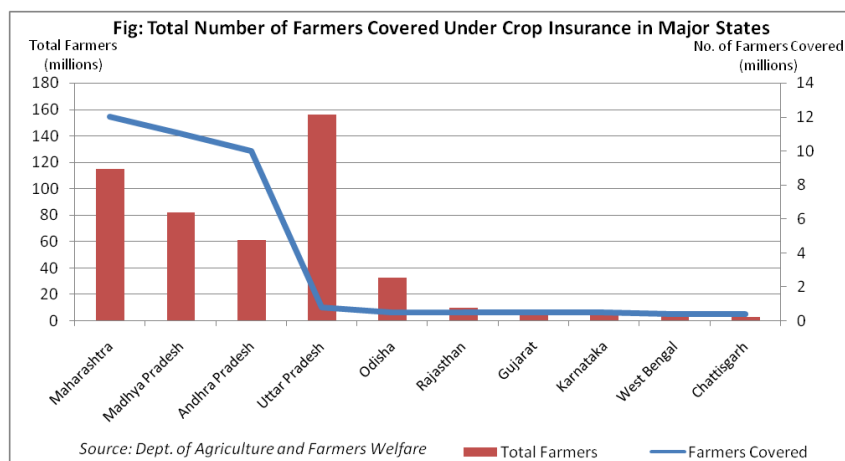


these farmers have actually been the same farmers who had also availed the other insurance schemes running concurrently in the country. This is based on the fact that traditionally, it's the large and well to do farmers in the country who avail crop insurance and for them, paying the nominal premiums for different insurance schemes and having multiple insurance policies for their crops should not be a big financial burden. In 2011-12, a total of about 1.3 crore farmers from both Rabi and Kharif seasons enrolled for the modified scheme. The total sum insured for the same year was INR 22,72,829 Lakhs. The numbers for both Rabi and Kharif in the following year of 2012-13 increased substantially. Rabi 2012-13 recorded 55,91,512 number of farmers opting for the Weather Based Scheme and INR 10,65,546 Lakhs marked as sum assured. The corresponding Kharif numbers were 88,54,147 and INR 14,62,396 Lakhs as sum assured. However, the numbers stated falling in the subsequent years and during Rabi 2014-15, number of farmers opting for this scheme was 30,79,551 and the total sum assured was INR 4,40,068 Lakhs. Kharif season of the same year too registered less numbers with number of farmers being 53,97,709 and sum assured being INR 8,53,792 Lakhs.

Gross premium paid for the scheme in Rabi 2011-12 was INR 81,472 Lakhs while the total value of claims reported was INR 75,114 Lakhs. The premium collected for Kharif 2012 was INR 1,29,474 Lakhs and the total amount of claims reported was INR 87,681 Lakhs. It continued to increase in the following years till Kharif 2014 when the gross premium and the total claims reported for this season were INR 1,56,564 Lakhs and INR 1,23,529 Lakhs respectively. However, Rabi 2014-15 and Kharif 2015 witnessed a drastic decline in terms of both gross premium collected and claims reported.

The Weather Based Crop Insurance Scheme started on a pilot scale in 2011-12 during Rabi 2011-12. In the first season, 59,44,759 ha of crop area were insured and it benefitted 27,32,017 farmers across the region of implementation. The first Kharif season in 2012 of the pilot project when implemented recorded 1,11,24,734 ha of crop area and 67,52,196 farmers got benefitted. During 2012-13, that includes Kharif and the Rabi seasons, total area covered by this pilot scheme was 1,76,90,070 ha and total number of farmers benefitted was 1,08,05,097. The area increased to 1,43,92,338 ha benefitting 96,12,537 farmers during 2014-15 seasons of Rabi and Kharif.

Like other agriculture related schemes ranging from fertilizer subsidies to subsidised loans and loan waiver for farmers, crop insurance schemes have witnessed that the benefits are highly skewed in favour of just a few states and only the large and wealthy farmers. Number of farmers covered by crop insurance is more in states like Maharashtra, Madhya Pradesh and Andhra Pradesh. Within these states too, it was mostly the large farmers who reaped the benefits of the insurance schemes. Interestingly, as seen in the figure below, a state like Uttar Pradesh, which has the highest farming population, has one of the least numbers of farmers covered by crop insurance.





Pradhan Mantri Fasal Bima Yojana (PMFBY)

The Pradhan Mantri Fasal Bima Yojana (PMFBY) is the most recent avatar of crop insurance in the country. The scheme was launched on 18th February 2016 by Prime Minister Shri Narendra Modi. The scheme is being administered by Ministry of Agriculture.

Basic features

PMFBY

PMFBY provides a comprehensive insurance cover against failure of the crops, thus helping in stabilising the income of the farmers and encouraging them for adoption of innovative practices. The Scheme can cover all Food & Oilseeds crops and Annual Commercial/Horticultural Crops, for which past yield data is available and for which requisite number of Crop Cutting Experiments (CCEs) will be conducted, being a part of the General Crop Estimation Survey (GCES). The scheme is compulsory for loanee farmers obtaining Crop Loan /KCC account for notified crops. However, it is voluntary for Other/non loanee farmers who have insurable interest in the insured crops.

The Maximum Premium payable by the farmers will be 2% for all Kharif Food & Oilseeds crops, 1.5% for Rabi Food & Oilseeds crops and 5% for Annual Commercial/Horticultural Crops. The difference between premium and the rate of Insurance charges payable by farmers shall be

shared equally by the Centre and State. The seasonality discipline shall be the same for loanee and non-loanee farmers.

The scheme will be implemented by AIC and other empanelled private general insurance companies. Selection of Implementing Agency (IA) will be done by the concerned State Government through bidding. The existing State Level Co-ordination Committee on Crop Insurance (SLCCCI), Sub-Committee to SLCCCI, District Level Monitoring Committee (DLMC) shall be responsible for proper management of the Scheme. The Scheme shall be implemented on an 'Area Approach basis'. The unit of insurance shall be Village/Village Panchayat level for major crops and for other crops, it may be a unit of size above the level of Village/Village Panchayat.

The Loss assessment for crop losses due to non-preventable natural risks will be on Area approach. In case majority of insured crops of a notified area are prevented from sowing/planting the insured crops due to adverse weather conditions, that will be eligible for indemnity claims up to maximum of 25% of the sum-insured. However, losses due to localised perils (Hailstorm, landslide & inundation) and Post-Harvest losses due to specified perils, (Cyclone/Cyclonic rain & Unseasonal rains) shall be assessed at the affected insured field of the individual insured farmer.

Three levels of Indemnity, viz., 70%, 80% and 90% corresponding to crop Risk in the areas shall be available for all crops. The Threshold Yield (TY) shall be the benchmark yield level at which Insurance protection shall be given to all the insured farmers in an Insurance Unit. Threshold of the notified crop will be moving average of yield of last seven years, excluding yield up to two notified calamity years multiplied by Indemnity level.

In case of smaller States, the whole State shall be assigned to one IA (2-3 for comparatively big States). Selection of IA may be made for at least 3 years. The designated / empanelled companies participating in bidding have to bid the premium rates for all the crops notified / to be notified by the State Govt. and non-compliance will lead to rejection of company's bid.

Crop Cutting Experiments (CCE) shall be undertaken per unit area /per crop, on a sliding scale, as prescribed under the scheme outline and operational guidelines. Improved Technology like Remote sensing, Drone etc. will be utilised for estimation of yield losses. State governments

should use Smart phone apps for video/image capturing CCEs process and transmission thereof with CCE data on a real time basis for timely, reliable and transparent estimation of yield data. The cost of using technology etc. for conduct of CCEs etc will be shared between Central Government and State/U.T. Governments on 50:50 basis.

There will be a provision of on account claims in case of adverse seasonal conditions during crop season viz. floods, prolonged dry spells, severe drought, and unseasonal rains. On account payment up to 25% of likely claims will be provided, if the expected yield during the season is likely to be less than 50% of normal yield. The claim amount will be credited electronically to the individual Insured Bank Account. Adequate publicity needs to be given in all the villages of the notified districts/ areas.

Weather Based Crop Insurance Scheme (WBCIS)

The structure of farmer's premium under WBCIS will be at par with the proposed PMFBY. The Criteria of selection of Implementing Agency and area allocation will be same as PMFBY. The other broad features will remain same.

Unified Package Insurance Scheme (UPIS)

Unified Package Insurance Scheme will be implemented in selected 45 districts on pilot basis to provide financial protection & comprehensive risk coverage of crops, assets, life, and student safety to farmers. Pilot will include seven sections Viz., crop Insurance (PMFBY/WBCIS), Loss of Life (PMJJBY), Accidental Death & Disability (PMSBY), Student Safety, Household, Agriculture implements & Tractor. Crop Insurance will be compulsory. However, farmers can choose at least two sections from remaining. Farmers may be able to get all requisite insurance products for farmers through one simple proposal/ application Form. Two flagship schemes of the Government, viz PMSBY & PMJJBY have been included apart from insurance of assets. Pilot scheme will be implemented through single window. Premium of PMSBY & PMJJBY is to be transferred to insurance companies which have tie ups with the concerned banks. Processing of claims (other than Crop Insurance) on the basis of individual claim report.

Problems faced in PMFBY

A well-conceived pro-farmer agricultural crop insurance scheme — the PMFBY — is faced with the prospect of coming a cropper. The reason is the failure of most states to make timely payments of their premium subsidy share and also conduct the requisite number of crop cutting experiments (CCEs) for assessment of yield losses.

Under the PMFBY's operational guidelines, state governments are supposed to call bids for the selection of insurance companies in early February, well ahead of the new crop year. This is followed by the issuance of notifications incorporating all relevant details — the crops covered and companies operating in different areas, indemnity levels and average yields against which compensation is calculated, sum insured, actuarial premium rates and subsidy on this, etc. — by March in respect of the kharif season and by September for rabi. The cut-off dates for receipt of premium from farmers, making them eligible for insurance, are July 31 (for kharif) and December 31 (for rabi).

The states are also expected to release the first instalment of their premium subsidy contribution for kharif in August-September and the balance 50% by November-December, with the corresponding rabi season cut-offs being January-February and April-May respectively. Besides, they are required to carrying out CCEs — a minimum of 4 in every village/gram panchayat, 16 in every taluka/tehsil/block and 24 in every district — for estimation of yields. The CCE-based yield data is to be submitted to insurance companies within a month after harvesting, which happens during October-December for the kharif and April-June for the rabi crop. The companies, in turn, are to process, approve and make payments of the final claims in three weeks from the receipt of the yield data.

If the states provide their full share of premium subsidy along with yield data not later than January for kharif and July for rabi, farmers can receive their claim payments within reasonable time. Insurance companies will not process claims unless they get their full premium payment and also the crop yield data for loss assessment.

Unfortunately, the above 'seasonality discipline' is not being maintained by most states. Rajasthan, for instance, issued the notification of the PMFBY scheme for kharif 2017 only on July 22, when the bulk of sowing was already completed. Even for the rabi season, the notification came on November 3, when farmers would have finished planting their main mustard crop. This would automatically have deprived them from seeking protection against losses due to failed/prevented sowing.

The states are pushed to at least notify the scheme before April 15, to allow adequate time for the implementation agencies (insurance companies) and also for banks to debit the premiums and upload the details of the individual insured farmers. Even for the coming kharif 2018 season, the states — barring a few such as Maharashtra, Karnataka and Odisha — are yet to issue the necessary notifications.

Season-wise, year-wise performance of crop insurance schemes (in INR crore)

Particulars	2016-17			2017-18		
	Kharif	Rabi	Total	Kharif	Rabi	Total
Gross premium	16349.32	5830.5	22179.82	19124.67	5328.89	24453.56
• Farmers' share	2927.17	1456.14	4383.31	2924.47	1191.06	4115.53
• Centre's subsidy	6624.52	2179.38	8803.9	8041.47	2046.67	10088.14
• States' share	6797.63	2194.98	8992.61	8158.73	2091.16	10249.89
Estimated claims	-	-	15624.38	13655.03	-	-
Approved claims	9983.55	4449.86	14433.41	1759.16	-	-
Paid claims	-	-	12959.1	401.83	-	-
Farmers covered (lakhs)	405.76	169.12	574.88	327.08	152.04	479.12
Farmers benefited (lakhs)	91.17	21.06	112.23	-	-	-
Area insured (lakh ha)	379.07	192.47	571.54	332.17	143.08	475.25

Source: Ministry of Agriculture and Farmers' Welfare

The ultimate sufferer from this is the farmer. In 2016-17, gross premium collections of insurance companies — both charged to farmers as well as subsidy received from the Centre and states — amounted to INR 22,180 crore. As against this, payment of claims totalled just

INR 12,959 crore. While that can probably be attributed to 2016 being a normal monsoon year and no reports of widespread crop damage or losses, it is striking, nevertheless, that the claims paid out are lower than what has been estimated by state governments or even approved by insurance companies. And these, for crops that were harvested or suffered yield losses at least a year ago.

The same story has been repeated in 2017-18, where insurance companies have collected over INR 24,450 crore worth of premium receipts even after the delays by states in forking out their subsidy contribution. But the fact that payouts to farmers have so far totalled just INR 402 crore — when more than four months have passed since the kharif crop was harvested — points to undue delays in the furnishing of yield data by states. Further, the CCE-based yields are themselves prone to questioning by insurance companies, which is reflected in the gap between the claims approved by them and the losses estimated by the states (as shown in the table).

The weakest link in PMFBY is the CCE. Crop loss assessment has to not only be timely, but also reasonably accurate in order to inspire confidence among insurance companies.

The result is that a scheme that looks good on paper is now virtually flattering to deceive. For farmers, a uniform 2% premium rate on the sum insured for all kharif season food grains and oilseeds, while 1.5% for rabi crops and 5% for annual and horticultural crops, is the lowest they can hope for. The sum insured being equal to the 'scale of finance' (the loan limit fixed by banks, covering the underlying crop's estimated production costs) and coverage extending to losses at every stage (from sowing to post-harvest) makes PMFBY all the more attractive to the farmer.

In 2016-17, a total payout of INR 12,959.10 crore to 1.12 crore farmers was made under PMFBY. That works out to INR 11,571 per farmer. But more than the amount, it is the timeliness of payment that matters. If the farmer has less or no crop to sell because of rainfall failure, and there is inordinate delay in insurance claim settlement, he is invariably forced to go to the moneylender.

This situation can, perhaps, be significantly addressed if PMFBY is made a fully Centrally-funded scheme. Currently, states have to pay 50% of the premium subsidy and also do all the

CCE and other groundwork — for a scheme bearing the Prime Minister’s name. Once the Centre starts bearing the entire subsidy cost, the insurance companies can no longer complain about not getting their premium monies upfront and in time. The states, too, would be forced to fall in line, if the release of premium subsidy is linked to their adhering to ‘seasonality discipline’ that is lacking now.

Complete central funding might go against the grain of competitive cooperative federalism advocated by the Modi government. But if the Centre can pay 100% subsidy on fertilisers, it could also take complete ownership of a scheme more deserving of support than even interest subvention on crop loans.

Making crop insurance work

In recent months, several places in north India experienced unseasonal dust and thunderstorms, followed by unseasonal rains. This has cost lives and led to extensive crop damage. With freak weather events becoming more common, protection of farmers against these risks figures prominently in the Narendra Modi government’s agricultural policy.

From the Comprehensive Crop Insurance Scheme (1985) through the National Agriculture Insurance Scheme (1999-2000), Modified National Agriculture Scheme (2010) and on to the Pradhan Mantri Fasal Bima Yojana (PMFBY) (2016), India’s agricultural insurance schemes have undergone several changes in their approaches. Mitigating risk in the agricultural sector has a direct implication for agricultural productivity and farmer welfare. It also intersects with some of the key sustainable development goals (SDGs), such as ending poverty, achieving food security and curbing hunger.

In spite of the government’s good intentions, assessments of the PMFBY face several challenges that make processing and verification of insurance claims error-prone and time-consuming. Payouts do not reach farmers at the right time and in amounts commensurate with their losses.

Many experts and organizations working in this area are now recommending the use of information and communication (ICT) tools to help farmers regain faith in crop insurance schemes and make them more efficient and transparent.

The International Initiative for Impact Evaluation (3ie) has funded a number of studies that explore the feasibility of using ICTs in the field of agricultural risk mitigation. A 3ie-funded study conducted by researchers at the International Food Policy Research Institute demonstrates how to capitalize on the availability of low-cost internet and the rising use of smartphones. This study looks at the effectiveness of a smartphone-based app amongst 750 smallholder wheat producers across Haryana and Punjab—the second and third highest wheat-producing states in India, respectively.

The novel picture-based insurance (PBI) product welds technology with weather index-based insurance (WBI). Farmers are asked to take pictures from the same site with the same view frame two to three times a week throughout the cropping season. The series of images thus created helps insurance agencies examine the condition of the crops. Based on the assessment, payments for losses are directly issued to the farmers' bank accounts. Additionally, the application also provides customized agricultural advisory to farmers by experts, ensuring continual interaction. Initial findings have been promising. In the evaluation sample, farmers demonstrate relatively higher uptake of the PBI.

Another study by the Centre for Budget and Policy Studies (CBPS) examines the PMFBY in Karnataka, which incorporates the use of mobile technology to record and upload the crop-cutting experiments (CCE), a mechanism to determine the overall yield of the village. An Android-based mobile application records and transmits the CCE data using smartphones. This data is transferred to the central crop insurance portal, making it available in real time to government officials and insurance companies. The smartphone data improves data quality as it contains vital information, such as photos and videos of the particular area, geo-tagging and time stamping crop area, probable harvest date, net weight of the produce obtained after harvesting and weight of the wet yield. The use of ICT is expected to quicken compilation of data, verification and faster settlement of claim.

The use of mobile-based technology can also help allied activities. Throughout India, the adoption of livestock insurance is much lower than crop insurance. A similar evaluation study tested an app that would digitize livestock insurance registration in Gujarat. If successful in replacing some components of the offline process, this could significantly reduce the costs and increase adoption. This study by the Institute of Financial Management and Research

corroborated the importance of having sufficient infrastructure and network to roll out the product.

ICTs can address not only supply side and process-related bottlenecks but also influence behaviour change on the demand side. For example, ICTs such as the PBI that require farmers to participate may induce farmers to develop a vigilant attitude towards any loss of crop. Indeed, a number of farmers reported that visiting their fields more, even if it was to take photographs, made them more aware of the state of their crops. This may outweigh the commonly assumed risk that farmers may wilfully neglect their farms once these are insured. An encouraging finding from a formative evaluation of the PBI shows that farmers in a randomly assigned treatment group that received PBI were no more likely to report lower yields than a control group that received a regular WBI.

Formative and process evaluations of ICT-based programmes, usually done at the beginning of a programme spanning over a few months, can help policymakers take prompt programme-specific decisions. These evaluations typically have small sample sizes. By identifying various challenges, such evaluations can lead to better programme selection and design that are cost-effective. However, policymakers often demand more rigorous evidence to take informed decisions to scale up ICT-based programmes that aid agricultural insurance schemes. Impact evaluations that are based on counterfactuals with a large sample size, and conducted over a longer period, can surely inform scaling up and replicability of such programmes. And in turn, the resultant socioeconomic impact will help farmers across India.

Analysis of the scheme

An analysis of the government's flagship national agriculture insurance scheme, the PMFBY, has suggested that while being far superior to previous such schemes, its implementation is seriously compromised.

The report was released by New Delhi based non-profit Centre for Science and Environment (CSE). The assessment was based on field study in Haryana, Tamil Nadu and Uttar Pradesh, as well as national level engagement with various stakeholders, including farmers and farmers organisations, insurance companies and government departments.

Across the world, agriculture insurance is recognised as an important part of the safety net for farmers to deal with the impacts of extreme and unseasonal weather due to climate change.

Hits and misses of PMFBY

The PMFBY was launched by the Centre on April 1, 2016 to help farmers cope with crop losses due to unseasonal and extreme weather. It replaced the National Agricultural Insurance Scheme and the Modified National Agricultural Insurance Scheme. The Weather-Based Crop Insurance Scheme (WBCIS) remains in place, though its premium rates have been streamlined with the latest scheme.

PMFBY has more farmer-friendly provisions than its predecessors. It reduced the burden of premium on farmers significantly and expanded coverage. It also promoted use of advanced technologies to estimate losses accurately and accelerate payments to farmers.

Positives

- Coverage of agricultural insurance significantly increased in kharif 2016 compared to kharif 2015 across India. The number of farmers insured crossed 4 crores during kharif 2016, a jump from 3.09 crores in kharif 2015.
- The sum insured is now closer to the cost of production than earlier. It has gone up from INR 20,500 per hectare of land during kharif 2015, to INR 34,370 in kharif 2016. This means in case of losses, farmers should theoretically get significantly higher compensation than earlier. However, in some states like Rajasthan, the sum insured remains very low—about one-third of the cost of production.

Negatives

- **Gaps in assessment of crop loss:** The sample size in each village was not large enough to capture the scale and diversity of crop losses. In many cases, district or block level agricultural department officials do not conduct such sampling on ground and complete the formalities only on paper. CSE also noted lack of trained outsourced agencies, scope of corruption during implementation and the non-utilisation of technologies like smart phones and drones to improve reliability of such sampling.

- **Inadequate and delayed claim payment:** Insurance companies, in many cases, did not investigate losses due to a localised calamity and, therefore, did not pay claims. For kharif 2016, the claim payment to farmers was inordinately delayed, till April 2017 and claims for kharif 2016 were not paid or were partly paid in 14 out of 21 states. Only 32% of the reported claims were paid out by insurance companies, even when in many states, the governments had paid their part of premium.
- **High actuarial premium rates:** Insurance companies charged high actuarial premium rates during kharif 2016 – the all-India rate was approximately 12.6%, which was the highest ever. Much higher rates were charged in some states and regions. The average actuarial rate in Gujarat was 20.5%, in Rajasthan 19.9%, and in Maharashtra 18.9%.
- **Massive profits for insurance companies:** CSE’s analysis indicates that during kharif 2016, companies made close to INR 10,000 crore as gross profits.
- **Coverage only for loanee farmers:** PMFBY remains a scheme for loanee farmers – farmers who take loans from banks are mandatorily required to take insurance. The percentage of non-loanee farmers availing insurance remained less than 5% during kharif 2016 and 2015. Like previous crop insurance schemes, PMFBY fails to cover sharecropper and tenant farmers.
- **Poor capacity to deliver:** There has been no concerted effort by the state government and insurance companies to build awareness of farmers on PMFBY. Insurance companies have failed to set-up infrastructure for proper implementation of PMFBY. There is still no direct linkage between insurance companies and farmers. Insured farmers receive no insurance policy document or receipt.

The report has also identified issues like delayed notification by state governments, lesser number of notified crops than can avail insurance, problem with threshold yield estimation, etc. that have diluted the usefulness of PMFBY.

One of the key conclusions of the report is that PMFBY is not beneficial for farmers in vulnerable regions. For farmers in vulnerable regions such as Bundelkhand and Marathwada, factors like low indemnity levels, low threshold yields, low sum insured and default on loans

make PMFBY a poor scheme to safeguard against extreme weather events. The analysis shows that farmers in these areas might not get any claim even if more than half of their crops are damaged.

Improving implementation

CSE has given a series of recommendations to improve implementation of the insurance scheme.

- Coverage of tenant and sharecropper farmers should increase.
- All important crops should be covered under crop insurance. Diversification of crops and mixed farming should be promoted.
- Instead of threshold yield, 'Potential yield' should be used for crops for which historical average yield data is not available.
- Damage caused by wild animals, fire, cold waves and frost to crops should also be considered at the individual level. Damage caused by unforeseen weather events like hailstorms should also be included in the category of post-harvest losses.
- Farmers must be informed before deducting crop insurance premium. They must be given a proper insurance policy document, with all relevant details.
- Panchayati Raj Institutions and farmers need to be involved at different stages of implementation.
- The insurance unit (IU) must be reduced over a period of time. In any case, it should not be more than village level. If the IU cannot be at the individual level and is kept at village panchayat level, premium should also be collected at the village panchayat level.
- Incentivise groups of small farmers or women farmers and promote group insurance.
- Sum insured should not be less than scale of finance and/or cost of production.
- PMFBY timelines from insurance coverage to claim payment should be strictly adhered to.

- Robust assessment of crop loss should be done through capacity building of state governments, involvement of PRIs and farmers in loss assessment, auditing and multi-level checking to ensure credibility of data and testing incorporating technology such as remote sensing, drones and online transmission of data.
- All PMFBY related data related to farmers must be available in the public domain and shared openly with farmers.
- The clause addressing prevented sowing and post-harvest losses must be implemented appropriately by issuing state notifications prior to sowing.
- Robust scheme monitoring and grievance redressal mechanism should be in place.

In an era of climate change, a universal, subsidised agriculture insurance is crucial to safeguard the lives and livelihoods of farmers. But there is a need for a farmer-friendly, fair and transparent agriculture insurance. An agriculture insurance driven by profit motives will do more harm than good. The recommendations of this report aim to help government improve the provisions and implementation of PMFBY and make it a truly effective scheme.



Health Insurance

Health Insurance in India

India is presently undergoing enormous transition in healthcare system. Increased income and health consciousness among the majority of the classes, price liberalization, reduction in bureaucracy and the introduction of private healthcare financing are driving the change.

Infectious diseases such as malaria, dengue, tuberculosis, H1N1 pandemic influenza and antimicrobial resistance remain a continued threat to health and economic security of the people. At the same time, the country is dealing with the emerging problems of chronic non-communicable diseases such as cardiovascular diseases, diabetes, cancer which have now become the leading cause of mortality.

This epidemiological transition is being fuelled by social and economic determinants of health, as well as by demographic changes such as an ageing population, by environmental factors such as climate change, and by factors such as globalization, urbanization and changing lifestyles. As a result, the health infrastructure in the country is already under severe strain. Healthcare in India is largely underpenetrated, with government expenditure at around 1.25% of the GDP and an underperforming public healthcare ecosystem. It is extremely worrying that according to the World Bank report, nearly 55–60 million Indians are pushed into poverty every year because they are unfortunately compelled to shell out half of their annual household expenditure to meet medical needs, especially for hospitalisation. Even after almost 75 years of independence, there is no real health insurance scheme for 80% of the Indian population.

Universal health coverage for all Indians has been a key long-term objective of the Government of India. The new economic policy and liberalization process followed by Government of India since 1991 paved the way for privatization of insurance sector in the country. The Insurance Regulatory and Development Authority (IRDA) bill, passed in Indian parliament, was the important beginning of changes leaving significant implications for the health sector. Significant progress has been made under the National Health Mission (NHM). Nevertheless, India's geographical vastness, differences in living standards and huge population in rural area present a unique set of challenges for healthcare. Health problems have a far greater impact on poor families as they deplete their financial resources and sometimes also have to sell their land for getting treatment.

Currently, Indian health financing scene raises number of challenges, which are:

- Increase in health care costs
- High financial burden on poor eroding their financial resources, household savings and regular incomes
- Increasing burden of new diseases and health risks
- Due to under-funding of government health care, preventive and primary care and public health functions have not been given so much importance

To address these challenges and improve health care sector in India, there have been several measures taken by the government. The various health insurance schemes available in India can be broadly categorized as:

1. Voluntary health insurance schemes
2. Mandatory health insurance schemes or government run schemes (namely ESIS, CGHS)
3. Employer based schemes

1. Voluntary health insurance schemes

In private insurance, buyers are willing to pay premium to an insurance company that pools similar risks and insures them for health-related expenses. The main distinction is that the premiums are set at a level, which are based on assessment of risk status of the consumer and the level of benefits provided, rather than as a proportion of consumer's income. In the public sector, the General Insurance Corporation (GIC), New India Assurance Company, Oriental Insurance Company and United Insurance Company provide voluntary insurance schemes. The most popular health insurance cover offered by GIC is Mediclaim policy.

Mediclaim policy: It was introduced in 1986. It reimburses the hospitalization expenses owing to illness or injury suffered by the insured, whether the hospitalization is domiciliary or otherwise. It does not cover outpatient treatments. Government has exempted the premium paid by individuals from their taxable income. Because of high premiums it has remained limited to middle class, urban tax payer segment of population.

2. Mandatory health insurance schemes or government run schemes

Employer State Insurance Scheme (ESIS): Enacted in 1948, the employers' state insurance (ESI) Act was the first major legislation on social security in India. The scheme applies to power using factories employing 10 persons or more and non-power & other specified establishments employing 20 persons or more. It covers employees and the dependents against loss of wages due to sickness, maternity, disability and death due to employment injury. It also covers funeral expenses and rehabilitation allowance. Medical care comprises outpatient care, hospitalization, medicines and specialist care. These services are provided through network of ESIS facilities, public care centers, non-governmental organizations

(NGOs) and empanelled private practitioners. The ESIS is financed by three way contributions from employers, employees and the state government. Even though the scheme is formulated well there are problem areas in managing this scheme. Some of the problems are large numbers of posts of medical staff remain vacant due to high turnover and low remuneration compared to corporate hospitals, rising costs and technological advancement in super specialty treatment, management information is not satisfactory, the patients are not satisfied with the services they get, low utilization of the hospitals, in rural areas, the access to services is also a problem.

Central Government Health Insurance Scheme (CGHS): Established in 1954, the CGHS covers employees and retirees of the central government and certain autonomous and semi-autonomous and semi-government organizations. It also covers Members of Parliament, Governors, accredited journalists and members of general public in some specified areas. Benefits under the scheme include medical care, home visits/care, free medicines and diagnostic services. These services are provided through public facilities with some specialized treatment (with reimbursement ceilings) being permissible at private facilities. Most of the expenditure is met by the central government as only 12% is the share of contribution.

Universal Health Insurance Scheme (UHS): For providing financial risk protection to the poor, the government announced UHS in 2003. Under this scheme, for a premium of INR 165 per year per person, INR 248 for a family of five and INR 330 for a family of seven, health care for sum assured of INR 30000 was provided. This scheme has been made eligible for below poverty line families only. To make the scheme more saleable, the insurance companies provided for a floater clause that made any member of family eligible as against mediclaim policy which is for an individual member. In spite of all these, the scheme was not so successful. The reasons for failing to attract rural poor are many such as the public sector companies who were required to implement this scheme find it to be potentially loss making and do not invest in propagating it, to meet the target, it is learnt that several field officers pay the premium under fictitious names, identification of eligible families is a difficult task, poor find it difficult to pay the entire premium at one time for future benefit, foregoing

current consumption needs, paper work required to settle the claims is cumbersome, deficit in availability of service providers, set back due to health insurance companies refusing to renew the previous year's policies.

In 2004, the government also provided an insurance product to the Self-Help Group (SHG) for a premium of INR 120 and sum assured of INR 10000. However, the intake was negligible. The reasons for poor intake are similar to those cited above.

3. Employer based schemes

Employers in both public and private sector offers employer-based insurance schemes through their own employer. These facilities are by way of lump sum payments, reimbursement of employees' health expenditure for out-patient care and hospitalization, fixed medical allowance or covering them under the group health insurance schemes. The Railways, Defence and Security forces, Plantation sector and Mining sector run their own health services for employees and their families.

Rashtriya Swasthya Bima Yojana (RSBY)

To provide and improve coverage of health insurance for the people below poverty line (BPL) and ensure access of health care facilities to them, RSBY was launched by the Ministry of Labour and Employment, government of India in 2008. The key highlights of this scheme are the coverage of hospitalization charges up to INR 30,000 and for a wide range of diseases which require such treatments. It also includes cashless benefits through, fixed packages rates and covers for existing conditions from the day one. This scheme was such a massive hit among people and had a great impact, with more than 100 million people enrolling across 472 districts in the country. Additionally, nearly 12,531 hospitals empanelled to provide such benefits.

Currently, there has been a renewed effort by the current government in utilizing the socially oriented schemes after witnessing their impact. There have been measures taken to cover a wider section of people and improve their security. A slew of measures has been introduced for the welfare of policy holders.

States also provide various health insurance schemes for people. Some of those are listed below:

State	Name of the scheme
Himachal Pradesh	Mukhya Mantri State Health Care Scheme
Punjab	Punjab Government Employees and Pensioners Health Insurance Scheme
Rajasthan	Bhamashah Swasthya Bima Yojana, State Insurance and Provident Fund Department, Rajasthan Chief Minister's Relief Fund
Madhya Pradesh	MP Swasthya Suraksha Yojana
Uttarakhand	Mukhyamantri Swasthya Bima Yojana and U-Health Card
Arunachal Pradesh	Arunachal Pradesh Chief Minister Universal Health Insurance Scheme (APCMUHIS)
Assam	Atal Amrit Abhyan, Assam Aarogya Nidhi, Sneha Sparsha
Tripura	Tripura Health Assurance Scheme for Poor
Jharkhand	CM's Health Insurance Scheme, Sarva Swasthya Mission
West Bengal	West Bengal Scheme, Swasthya Sathi, Mabhoi Scheme
Odisha	Biju Krushak Kalyan Yojana
Gujarat	Mukhyamantri Amrutum and Vatsalya Yojana, Chiranjeevi Yojana
Goa	Chief Minister's Comprehensive Health Insurance Scheme
Kerala	Comprehensive Health Insurance scheme

Telangana	Arogyashree (co-branded with RSBY)
Andhra Pradesh	Arogya Raksha Health Scheme, Dr. NTR Vaidya Seva Scheme
Tamil Nadu	Chief Minister’s Comprehensive Health Insurance Scheme

Table 3.1: State wise health insurance schemes

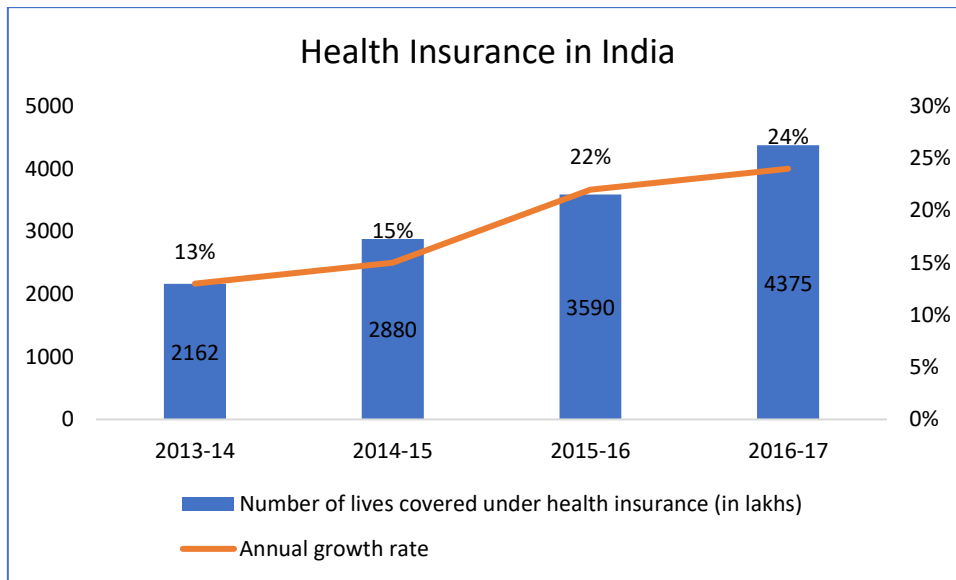


Table 3.2: Growth of health insurance in India

Looking at the Table 3.2: Growth in health insurance in India, we can say that despite the increase in annual growth, more than 80% of the population still does not have any significant health insurance coverage. It demonstrates that past insurance schemes were unsuccessful because of lack of awareness among relevant beneficiaries, the geographic spread of the coverage, and lack of support from industry stakeholders.

Case Study

One state government scheme that stands out from others is Rajasthan's Bhamashah Swasthya Bima Yojana (BSBY), launched in 2015, which was designed to avoid the shortcomings of earlier schemes. The study was conducted by *IndiaSpend*. They visited a private hospital in Mount Abu, Rajasthan, to see what BSBY has got right. Their findings are mentioned below:

Outpatient spending on medicines high

While the private sector provides 75% of outpatient care and 55% of inpatient care in India, it is outpatient care that accounts for 75% of the out-of-pocket expenditure on health, as per the Brookings India research paper. Of this, NSSO 2014 data show, 72% of all health expenditure in rural areas and 68% in urban areas is on buying medicines for non-hospitalised treatment.

People's health burden mostly arises from the purchase of medicines for frequent illnesses (such as colds, coughs and fevers) which are mostly preventable and do not need hospitalisation, and from spending on managing chronic diseases, was mentioned to *IndiaSpend*.

To plug this gap, in October 2011, the Rajasthan government launched the Mukhyamantri Nishulk Dawa Yojana (Chief Minister's Free Medicine Scheme) to provide free essential medicines to all, and in April 2013, the Mukhyamantri Nishulk Jaanch Yojana (Chief Minister's Free Investigation Scheme) to provide free basic diagnostics.

Then, during the 12th Five Year Plan (2012-17), the Rajasthan government expanded its primary healthcare infrastructure on a war footing. As a result, today Rajasthan has more health sub-centres (the first point of contact between the primary healthcare system and the community), primary health centres (PHCs, the first point of contact between the community and the medical officer), and community health centres (CHCs, referral centres for four primary health centres staffed by four medical specialists—a surgeon, physician, gynaecologist and paediatrician each) than the minimum recommended by the government for the rural population.

This seems to have worked. Nearly 80% more people accessed government health infrastructure in Rajasthan in 2016 as in 2013—eight million per month as against 4.4 million, as per September 2017 presentation by the Rajasthan Medical Services Corporation. The government attributes this success to the free medicine scheme.

However, although distributing free medicines has increased the government's per capita health expenditure eight-fold from INR 5.70 to close to INR 50, the impact of this spending on beneficiaries is yet to be formally evaluated.

Anecdotal evidence is mixed. Overall, the free medicine scheme is useful for poor patients who cannot afford to buy them and only concern would be some of the drugs that are bought from the government for distribution to asthma patients could be of inferior quality.

There were 605 medicines in the essential drugs list for medical college hospitals in August 2017, 525 for district hospitals, 446 for CHCs, 242 for PHCs and 33 for sub-centres, the Rajasthan Medical Services Corporation presentation said.



Ayushman Bharat – National Health Protection Scheme

Recognising the imperative to protect India's poor and vulnerable and addressing the challenges previously faced by other government schemes, the central government, in February 2018, announced world's largest government-funded health programme 'Ayushman Bharat'. The programme covers primary, secondary and tertiary healthcare. It is a major step to ensure healthcare access to 10 crore families or approximately 50 crore population, with INR 5 lakhs insurance cover per family per year.

If the government manages to implement the Ayushman Bharat—National Health Protection Mission (AB-NHPM) effectively, it is expected that it will have a far-reaching impact on the country's healthcare and insurance landscape.

This flagship scheme is likely to benefit more than 37% of the population, meaning that nearly all the poor and vulnerable families will be covered. The government expects that it will require almost INR 12000 crore for its implementation, with cost shared on a 60:40 basis between central and state governments.

The government further announced setting up or converting some 150,000 subcentres in the country into so-called 'health & wellness' centres which will offer a set of services including maternal and child health services, mental health services, vaccinations against selected communicable diseases, and screening for hypertension, diabetes, and some cancers. The sub-centres at present cater to a population of about 5000 people each and are manned by two paramedical staff.

The Ayushman Bharat programme is apparently driven by two main aims:

- 1) to strengthen primary health care which has been lacking in the country and
- 2) to offer financial protection from catastrophic expenditure, often encountered once a family member is sick and needs long-term health care.

Ayushman Bharat is expected to take India towards universal health coverage, the situation when "all people obtain the health services they need without suffering financial hardship when paying for them", to quote the World Health Organization.

The scheme is also expected to create tremendous awareness of health insurance, the same way Pradhan Mantri Jan Dhan Yojana did for bank accounts.

Considering financials of the scheme, government will try to ensure that both insurers and customers get reasonable rates. Size of the scheme, which is very large, would ensure that insurers don't face heavy losses. Reasonable pricing will ensure that the scheme is managed efficiently and does not lead to lapses or delays.

As per the scheme, states will decide and devise their own ways and adequate funds will be provided, though the ratio will differ from state to state. For most states, funding will be shared in the ratio of 60:40 with Centre contributing the majority. The North Eastern states, Himachal Pradesh, Uttarakhand and J&K, will however, enjoy 90:10 funding ratio.

Each state will need to create an apex body that will implement and monitor the scheme. The Centre's funding will be to this apex body. States like Telangana, MP, Assam, Sikkim and Andhra Pradesh and 8 others have opted for the trust model where the bills will be reimbursed directly by the government. Twelve states are expected to adopt the insurance model, where the government will pay an amount to an insurance company that in turn will pay the hospitals. Gujarat, Tamil Nadu, and 6 others, for instance, have chosen the 'mixed mode implementation'.

The government will also implement standard treatment guidelines to ensure that every patient receives quality treatment and not substandard treatment. To make sure this is followed through, each empanelled hospital will have an 'Ayushman Mitra' to assist patients with the procedure. Moreover, there will be regular auditing and monitoring to keep the treatment meted out in check as well as a redressal mechanism will be in place.

To speed-up the process, the government has been reaching out to beneficiaries since April this year through Panchayats and Gram Sabhas. Beneficiaries are being selected on the basis of the Socio-Economic Caste Census (SECC) data of 2011. Initially, beneficiaries would be identified through their mobile numbers before a unique ID is issued.

Total outlay of the scheme in terms of the premium to be paid by the government to insurance firms will be discovered when firms bid for the business. Exact cost to government is not known yet but is expected to be much higher than INR 12000 crore that has been estimated so far.

Ayushman Bharat has the potential to bring a tremendous positive change in not only addressing the affordability of medical procedures but also as a concomitant in the development of medical infrastructure. However, there exist some challenges such as lack of uniformity of hospital procedures and protocols for doctors, and to manage leakages for the scheme to succeed and not exceed cost projections, appropriate measures will have to be taken.

Expected Challenges

There are various challenges that the scheme may face post implementation, some of those are listed below:

1. Enrolment of ghost beneficiaries
2. Impersonation in connivance with cardholders and hospital
3. Conversion of OPD patient into an IPD patient
4. Deliberate blocking of higher priced package
5. Treatment of diseases which a hospital is not equipped for
6. Doctors performing unnecessary procedures
7. Hospitals charging fees even though it's a cashless scheme

Eligibility Criteria for Ayushman Bharat Scheme

There are certain eligibility criteria which will be followed for determining the beneficiaries under Ayushman Bharat Scheme. These criteria, as of now, are listed below:

In rural areas:

1. Families living in only one room with "kuchcha walls and kuchcha roof"
2. Families with no adult members aged between 16 and 59
3. Female-headed family with no adult male member in the 16-59 age group
4. Families having at least one disabled member and no able-bodied adult member
5. SC/ST households
6. Landless households deriving major part of their income from manual casual labour
7. Destitute and those surviving on alms
8. Manual scavenger families
9. Primitive tribal groups
10. Legally-released bonded labourer

In urban areas:

The government has made a list of these 11 occupational categories of workers who are automatically included in the list:

1. Rag picker

2. Beggar
3. Domestic worker
4. Street vendor/cobbler/ hawker/ other service provider working on streets
5. Construction worker/ plumber/ mason/ labour/ painter/ welder/ security guard/ coolie and other head-load workers
6. Sweeper/ sanitation worker / gardener
7. Home-based worker/ artisan/ handicrafts worker / tailor
8. Transport worker/ driver/ conductor/ helper to drivers and conductors/ cart puller/ rickshaw puller
9. Shop worker/ assistant/ peon in small establishment/ helper/ delivery assistant / attendant/ waiter
10. Electrician/ mechanic/ assembler/ repair worker
11. Washer-man/ chowkidar

Following table represents the basic differences between Rastriya Swasthya Bima Yojana (RSBY) and Ayushman Bharat.

Parameters	RSBY	Ayushman Bharat
Coverage	INR 30,000	INR 5,00,000
Services covered	Limited	Will cover high-end procedures
Premium	INR 300 - 400	Not yet finalized
Population covered	18 crores	50 crores

Table 3.3: Differences between RSBY and Ayushman Bharat

Key Features of Ayushman Bharat Scheme



Announced in Budget FY19	10 crores family beneficiaries	INR 5 lakhs cover per family
Families identified as per socio-economic caste census 2011	Funded by Centre and State in 60:40 ratio	To be merged with other State schemes
To be implemented through an insurance company or directly through a trust or a mixed model	Driven by strategic purchasing from private sector	All kinds of diseases are covered from day one of the policy. The benefit cover includes both pre and post hospitalization expenses.

Implementation

The scheme, if implemented properly could be a game changer for health care sector in India. It will enhance access to health care including early detection and treatment services by a large section of society who otherwise could not afford them. The identification of beneficiaries can be done by linking with Aadhar and similarly following up for services received and health outcomes achieved, thereby helping to monitor and evaluate the impact of the programme.

Ultimately, ABNHPS will help to achieve one of the UN Sustainable Development Goals or SDGs which is to move the country towards universal health coverage and equitable access to healthcare. This new scheme builds on the already existing RSBY. However, given that states are expected to agree for 40 per cent share under the NHPS and that health being a state subject, state ownership and commitment will be critical for the success of the programme.

The Finance Minister has made a budget allocation at INR 52,800 crores for the health ministry, up from INR 47,352 crore during the previous year signifying an increase of 11%, yet as percentage of the GDP, it is still among the lowest in the world. In addition, government plans increase the levy of health cess from 3 to 4%.

The first milestone under Ayushman Bharat envisages the setting up of around 1.5 lakhs health and wellness centres that will provide comprehensive healthcare, including non-communicable diseases, maternal and child health services as well as provision of free essential drugs and diagnostic services. While the Government has made an allocation of INR 1200 crores, it also envisages contribution of private sector via CSR as well as from philanthropic institutions.

The second milestone would be to provide health cover of up to INR 5 lakhs per family per year for secondary and tertiary care hospitalisation to 100 million poor and vulnerable families, making it the world's largest Government funded healthcare programme. The beneficiaries will be decided on the basis of socio-economic caste census, which uses criteria such as family structure, assets, and so on. The scheme has been launched in the spirit of cooperative federalism, as states have the option to choose the modalities for implementation and expansion.

It is clear that the ABNHPS, which primarily offers support for clinical services such as hospitalization, is unlikely to help fix the broken public health system in the country. The most critical issue remains the limited and uneven distribution of human resources at various levels of health services, with up to 40 per cent of health worker posts lying vacant in some states. Most primary health care centres suffer from perennial shortage of doctors and even district hospitals are without specialists.

Without addressing the human resource situation, public sector health care will remain of poor quality and largely unacceptable, forcing patients to go to the private sector. Therefore, till the time situation in public health care sector doesn't improve, it seems as if ABNHPS is likely to benefit private parties more than government health services. This will ultimately be unsustainable and even detrimental for the poor for whom the scheme is intended.

To maximise benefits, it may be wise to establish a link among various health initiatives announced in the budget and also with related programmes such as the National Health Mission.

Clarity is also needed on the services which will be provided by government health facilities and for which conditions patients will have to use private parties and mechanisms which are being thought of for these things. There is a need for uniformly pricing systems for various health interventions, including diagnostics and medicines, and making them transparent by displaying them in hospital premises.

Moreover, a continuum of care system also needs to be established by linking institutions or hospitals, with health centres and the community. Community engagement is thus crucial in planning and implementation of the programme and in ensuring that the health and wellness centres and the primary health centres are responsive to the needs of the community.

For the success of the programme, effective implementation is the key. For this it is advisable to set up an independent body or unit within the ministry of health & family welfare to plan, to coordinate and provide technical backstopping to states, including in capacity building and development of standards and guidelines for the programme. Such a unit will ensure uniform and systematic approach to programme implementation across the country.

Given its massive scale, implementation will need a mission-mode approach with integrated efforts from multiple departments, private and public stakeholders, and a comprehensive information education communication (IEC) and behaviour change communication (BCC) strategy. Outreach programmes will be more significant in states that don't have existing government-sponsored health insurance schemes.

ABNHMP's is hugely dependent on technology right from beneficiary identification and authentication, to seamless transfer of paperless data and claim settlement which could pose another hurdle in implementation. Many locations have low penetration of high-end data and mobile connectivity. Adoption of digital technology is also quite low in rural and remote areas. So, implementing a digital system in one go across India may not be feasible. Such areas will require alternative systems of rendering benefits and retaining data confidentiality.

Learning from the experience of the RSBY, the best way to identify fraudulent beneficiaries is through biometric application. This largely prevents impersonation and, if appropriately implemented, it can go a long way in benefiting the patients in the most hassle-free yet effective manner. Any public sector programme with such a large outlay is prone to fraud, waste and abuse. According to WHO, health system leakages including corruption and fraud are among the top causes of wastage of finances from the government in healthcare, with 20-40% of expenditure wasted due to inefficiencies.

The most important step is to acknowledge the problem and publish the data, which can be used to address the challenges and implement necessary changes. A comprehensive compliance programme, and improved medical billing processes to detect and prevent these frauds, can play a significant role. Government must look at a healthcare system with an integrated digital technology platform, which could have millions of combinations to check for medical necessity, safety and coding. ABNHMP requires a practical and stepwise approach, along with cross stakeholder collaboration. This will help India manifest its dream of providing healthcare to all into reality.

Finally, the scheme is innovative and path-breaking in the history of public health in India, which may have a transformative impact if implemented in an effective and coordinated manner.



Impact

It is expected that Ayushman Bharat will positively impact the current healthcare ecosystem in the country by focusing on low-cost, good-quality drugs and centralised procurement. It will help in building capacities for effective claims management, clinical audits and hospital scrutiny. It will push for the development of IT infrastructure in healthcare sector which will further reduce the costs. It will also help the government in identifying additional sources of financing and setting up regulators to ensure fair competition.

The scheme will have a multiplier impact on the healthcare and allied sectors like pharmaceutical, diagnostics and medical devices and the overall Indian economy by way of employment generation.

Services and Industries benefitting out of this:

Services	Industries
Transportation	Pharma and diagnostics
Data management	Insurance
Hospitality	TPAs
Operations and general administration	Hospitals
Quality accreditation	Medical devices and supplies
Human resource management	Infrastructure

Ayushman Bharat scheme will also positively impact the healthcare ecosystem:

Hospitals: Hospitals will have to push themselves for better package rates, will have to focus on quality, accreditation and operational improvements to reduce costs.

Pharmaceuticals and diagnostics: Pharmaceuticals companies will have to focus on providing low-cost, good quality drugs.

Insurance: Insurance companies will have to build capacities for effective claims management, actuaries, clinical audit and hospital scrutiny.

Digital and IT service providers: Companies in this sector will have to develop IT architecture to link patient data, hospital data and insurance companies with Socio-Economic Caste Census (SECC) and Aadhaar data. Additionally, digitisation trends will further help in reduction of costs, etc.

Government: Government will have to identify additional sources of financing, will have to build in system automation for monitoring and grievances redressal, will have to set up regulatory authorities to ensure fair competition among various other things.

Other Impacts

1. ABNHPM will make major interventions in primary, secondary and tertiary care that will cover prevention as well as promotion.
2. Health protection to poor and vulnerable families will help enhance their productivity and well-being and also avert wage loss and impoverishment.
3. It is expected to generate lakhs of jobs in the healthcare sector. Women in particular will play a major role as physiotherapists, nurses, doctors, mid-level providers, etc.
4. The programme will lead to new capacities and new services. Private hospitals will also be roped in through an empanelment procedure.

Additional benefits to the ecosystem of healthcare in India are:

The scheme mandates the adoption of standardised guidelines for treatment which includes improved consistency of care, curbing the tendency to overcharge patients, increase in evidence-based treatment and uniform billing across centres.

About 1350 treatments and surgical procedures have been identified for which package rates will be fixed. ABNHPM aims to generate repositories on hospitals, providers and other human resource and the insurance sector will be assisted with the management of claim costs in case of fraudulent claims.

The data generated during the implementation of the scheme will help in designing better and targeted health programmes in the future. The scheme also aims to improve the Registry of Hospitals in Network of Insurance (ROHINI) system through large-scale additions and registration of hospitals.

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