WORKING PAPER

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Liberalisation of the Insurance Sector:

An Analysis of India and BRICS

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September 2020

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Abstract

Global diversification of financial institutions, including the insurance sector, has proven beneficial to many economies by providing them with increasing capital flow, higher competition, and introduction of newer technologies and distribution channels. This paper aims to critically evaluate the liberalisation process of India's insurance sector and the impact it has had on the sector, both life and non-life segments. As India is in the process of opening its insurance sector to increasing foreign participation, we compare the liberalisation approach taken up by the BRICS countries for their own insurance sectors. Finally, a brief section has been included on the impact of the insurance sector on an economy's performance in the World Bank's Ease of Doing Business (EODB) index rankings.

Keywords: *Insurance, Liberalisation, Life Insurance, Non-life Insurance, India, BRICS, EODBs*

JEL: *G22, G28, F40*

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Liberalisation of the Insurance Sector: An Analysis of India and BRICS[1]

Saon Ray, Kuntala Bandyopadhyay and Vasundhara Thakur

1. Introduction

The last two decades have witnessed rapid globalisation of insurance sector. Countries opt to liberalise their domestic insurance sector for various objectives, such as growth and stabilisation of the sector, higher efficiency, risk diversification, and access to improved technology. There are also added benefits of better services and lower cost to compete with foreign insurers. The UK and the US were pioneers in the deregulation process of the financial sector in the 1980s. With the aim of creating a single European financial services market, the EU's banking and insurance directives led to widespread consolidation in the financial services markets in Europe via intra- and cross-sector mergers and acquisitions during the 1980s and the 1990s. The directives also deregulated insurance markets. It introduced true price competition in the EU insurance market, where previously prices were regulated by each nation (Cummins and Weiss, 2004). The late 1990s' reforms in Japan eliminated restrictions preventing financial services firms, including insurers, from competing in each other's markets (Hoshi and Patrick, 2012).

Insurance markets are influenced by global trends as well as local constraints (Lee and Lin, 2016; Cummins and Vernard, 2008). Among the important global trends are the increasing sophistication of insurance products, globalisation of risk diversification through reinsurance, emergence of mega- financial intermediaries, and the growing importance of supranational agencies such as the World Bank and the World Trade Organization. On the other hand, political, legal, and cultural heterogeneity among countries and regions also have a profound impact on insurance markets. Differences in financial markets, taxation, regulatory systems, insurer investment strategies, and insurance distribution systems are also key local factors to consider.

The World Bank, the Inter-American Development Bank, and the WTO promoted liberalisation of the financial services sector, including insurance. The WTO played a major role in liberalisation of the Chinese insurance sector (Whalley, 2003). The World Bank also played a major role in influencing insurance and financial markets in South East Asia (Nayak and Mishra, 2014). The information revolution has been a facilitating factor for insurance sector liberalisation. Insurance and other financial companies were among the early adopters of modern communication technology and networks, which considerably reduced the cost of transmitting and processing information.

Many key emerging markets (e.g., China, Mexico, Brazil, Russia, and Turkey) currently have a level of GDP per capita associated with an elasticity of demand for insurance that is higher than in the advanced markets. Sigma (2019) envisages that prospects for the insurance sector

[1] The authors would like to thank Mr. Tamal Bandyopadhyay, Dr. Lalitagauri Kulkarni, and Dr. Amlan Ghosh for their comments on an earlier draft. The usual disclaimer applies.

in emerging markets remain strong. The Sigma report noted that the seven largest emerging markets will contribute up to 42 per cent of global growth, with China on its own contributing 27 per cent.[2] Ongoing urbanisation and the drive to widen financial inclusion will support development of insurance business in emerging economies. Additionally, several industry-specific factors will encourage growth in the emerging markets, such as introduction of best practices in regulation, improvements in market access, and the early stages of technology adoption.

This paper aims to present the relationship between liberalisation of the insurance sector and growth, focusing on India's experience. The next section briefly discusses the economic theory connecting liberalisation of the insurance sector and economic growth and empirical evidence of any such relationship. Section 3 describes in detail the liberalisation of BRICS' insurance sectors and the impact. Section 4 discuss the challenges and hindrances foreign insurers still face in operating profitably in India's insurance market. Section 5 elucidates the role played by an economy's insurance sector to improve the business environment of that country, which is reflected in the World Bank's Ease of Doing Business (EODB) index. Section 6 presents a brief discussion on the impact of COVID-19 on the insurance sector in the BRICS. Section 7 concludes.

2. Insurance and liberalisation: theory and empirical evidence

The association between the insurance sector and the macroeconomic development of an economy has been theoretically as well as empirically established.[3] The nexus of insurance and economic growth and financial development has been well established by a number of studies. Three categories of determinants have been identified that can lead to insurance growth: these are economic, legal/political and social factors.[4] Considerably less economic research has been concerned with how economic reforms or liberalisation impact the insurance sector.

2.1 Theoretical arguments

At a theoretical level, the insurance sector can influence the macroeconomic development of an economy via a range of channels. The insurance sector functions as a financial intermediary by investing the premiums received from policyholders into productive avenues leading to efficiency in resource allocation. In this process, it aids mobilization of savings in the form of premiums and reduces the need and level of precautionary savings that are not accessible to the financial markets, thereby stimulating investment in the economy (Liedtke, 2007). It also minimizes transaction costs by investing on behalf of several individual policyholders, generates liquidity and makes possible economies of scale in investment (Skipper, 1997).

Besides adding to the economic growth by itself, insurance can work in tandem with the banking and stock market to spur growth. Insurance activities by decreasing information and

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[2] https://www.insurancejournal.com/news/international/2019/03/08/519990.htm, accessed on 13 August 2019.

[3] Refer to Annexure 1 for a summary of papers.

[4] Hussels, et al. (2005)

transaction costs, pooling risks, improve financial intermediation and by aggregating firm information can support the resource allocation carried out by banks and capital markets (Arena, 2008). Existence of insurance such as property insurance also diminishes the possibility of extremely high levels of bankruptcy and assists credit transactions (Brainard, 2008).

The insurance sector shields the economy from risks – these are risks arising from adverse health conditions, the occurrence of natural calamities and accidents. These occurrences can lead to untoward consequences for individuals which can be a setback the economic development of a nation (Swiss Re, 2017). Low levels of insurance penetration in an economy can lead to a large share of the population falling in the uninsured and underinsured category which renders them vulnerable to detrimental shocks. This can also potentially worsen the prevailing poverty situation of the economy (Swiss Re, 2017). Insurance companies protect against these risks and assist beneficiaries in the expeditious financial recovery in case an unfavorable event takes place. Thus insurers offer ex-ante risk management and ex-post financial protection and recovery (Swiss Re, 2017).

Insurance against risks provides impetus to innovation and entrepreneurship. It also opens the door for capitalizing on high risk, high return investment opportunities. Moreover, insurance functions essentially as a pre-requisite for the smooth operation of trade (both internationally and domestically) and commerce since it protects against associated risks (Dickinson, 1998). The increasing specialization of trade and commercial activities call for more financial specialization and flexibility hence sparse insurance activities can work against the growth in trade and commerce (Skipper, 1997). The coverage provided by insurance activities also reduces the financial impact arising from unruly occurrences in the supply chain due to risks arising from rapid advances in technology (Weisbart, 2018). Through compensation for losses, it works as a financial cushion in case of a calamitous event hence smoothening out income and finances, thereby reducing volatility and preventing negative spillovers (Swiss Re, 2017).

2.2 Empirical analysis

Many studies have discerned a positive or long-run relationship between insurance and economic growth.[5] Others have been able to establish causality between the two variables.[6] However, some empirical studies also point towards mixed evidence regarding the relationship between the two variables.

In extremely low-income countries, banks and property/liability insurers may be relatively close substitutes in that banks can be expected to become providers of liquidity in countries where the insurance industry is inefficient (Webb, Grace and Skipper, 2002). The influence of insurance on economic development is greater in the developing economies as compared to the

5 Some of these papers are discussed in the Appendix e.g. Kugler and Ofoghi (2005), Arena (2008), Haiss and Sümegi (2008), Han et al. (2010), Njegomir and Stojić (2010), Oke (2012), Lee et al., (2013), Ghosh (2013), Verma and Bala (2013), Alhassan and Fiador (2014), Kaushal and Ghosh (2016) and Sawadogo, Guerineau, and Ouedraogo (2018). Outreville (2013) presented a review of 85 empirical papers.

6 These include Adams et al. (2009), Ching et al., Lee et al., (2013), Ghosh (2013), Alhassan and Fiador (2014), and Kaushal and Ghosh (2016).

developed ones. The results found by Han et al. (2010) for 77 developed and developing countries for the period 1994-2003 indicate that for developing (developed) economies, there is an increase of 9.17 per cent (1.87 per cent) in economic growth for a 1 per cent increase in total insurance density. Zhou et al. (2012) find for a set of 38 developed and developing countries that a standard deviation increase in insurance returns (life, non-life, and total) leads to more increase in GDP growth rate for emerging economies as compared to developed economies during the period 1982-2008. Arena (2008) conducted analysis on a set of 55 developed and developing countries with the study period of 1976-2004 and suggested that there is an impact of life and non-life insurance on economic growth at low and middle levels of economic development, with life insurance having a larger effect on economic growth at low levels of economic development and non-life insurance at middle levels of economic development.

Alhassan and Fiador (2014) in their study use the non-life component to represent the risk transfer and indemnification function of insurance and the life insurance component to express the financial intermediation aspect. The long term nature of the liabilities of life insurers warrants them to pledge capital resources for long term investment hence they can provide impetus to the insurance sector's role as a financial intermediary (Brainard, 2008).

Insurance, particularly life insurance, can work as a substitute for government social security programs (Skipper, 1997). The government expenditure saved by the presence of insurance activities can then be diverted into other state welfare activities which can improve economic development.[7] In addition to these benefits, the insurance industry directly supplements economic growth by generating employment and delivering services (Swiss Re, 2017).

2.3 Impact of liberalisation on the insurance sector

There is a strong correlative interconnection between globalisation and insurance activities. The trends of globalisation reflect in the insurance business (Liedtke, 2007; Lee and Chiu, 2016). Many experts believe liberalisation of the financial sector facilitates the host country's integration into world business cycles through improved allocative efficiency, higher technology transfer rates, and greater wages. In banking and finance and other financial sectors such as insurance, foreign direct investment (FDI) can potentially strengthen institutional development in the host country through improved regulation and supervision (Goldberg, 2004).

Sometimes only liberalising the insurance sector and taking down market access barriers to foreign companies is not enough to ensure market competitiveness. Market competition and efficiency can still be hindered by regulation. To promote competition, both liberalisation and deregulation, that is, lessening of national regulations, are required. Boonyasai, Grace, and Skipper (1999) found where liberalisation efforts were accompanied by deregulation, the gain to sectoral competitiveness was larger. For example, Korea and the Philippines undertook

7 A seemingly abstract and psychological advantage associated with insurance activities is that it offers peace of mind to the insured and reduces anxiety by instilling a sense of financial security (Skipper, 1997).

modest liberalisation and deregulation efforts, whereas Taiwan and Thailand only undertook modest liberalisation efforts. The study found that liberalisation and deregulation of the Korean and Philippine life insurance industries seem to have stimulated increases and improvements in productivity. Liberalisation of the Taiwanese and Thai life insurance businesses, however, seems to have had little effect on increases and improvements in productivity. The increase in productivity also depends on the state of the economy. Liberalisation and deregulation works better in a less stringent economy.

Financial liberalisation impacts the insurance sector through various channels:

1. *Risk taking behaviour of the insurance firm:* Although various studies (Pasiouras and Gaganis, 2013; Pope and Ma, 2008; Kaminsky and Reinhart, 1999) have dealt with the connection between financial liberalisation and insurance firms' risk-taking behaviour, the theoretical prediction is still inconclusive. Risk-taking behaviour differs between life and non-life insurers due to the differences in their profitability. Pure risks are usually traded in insurance and reinsurance markets, although more recently the market for pure risk has expanded to include alternative risk transfer mechanisms such as captive insurance companies and securitised insurance instruments (Cummins and Weiss, 2014).
2. *Cost channels*: Liberalisation impacts the insurance sector via cost channels. The Internet has made consumers more knowledgeable by providing them with information and diversified choice of insurance products. Litan (2001) argues that low-cost communication and deregulation in the financial markets facilitates the financial scope of financial players such as insurance companies. Pearson (1997) stresses how a decrease in cost of communication and storing and evaluating information resulting from globalisation influences the insurance sector. Managers of domestic firms in markets with high levels of concentration may not have proper incentives to keep costs under control. The presence of foreign competitors, however, may motivate domestic firms to cut costs, thus making them profitable (Leverty, Lin, and Zhou, 2009).
3. *Competitiveness:* Overall financial liberalisation also impacts the insurance sector's competitiveness and in turn boosts financial stability and consumer welfare in an economy. Policies reducing barriers to the participation of foreign firms are beneficial in curtailing the monopolistic tendencies of domestic-owned insurers and in increasing the competitiveness of the market. Alhassan and Biepke (2017), working with two decades' empirical evidence on a panel data of 79 insurers in South Africa from 2007 to 2012, found that the activities of small, foreign owned and single-line insurers improves the competitiveness of non-life insurance.
4. *Technology and skills*: Foreign firms may introduce new services, technology, and skills that domestic companies can recreate, resulting in more efficient practices. These companies may export high-skilled managers to work in their foreign branches and/or establish professional training programmes, increasing the quality of human capital in the industry.
5. *Regulation and supervision*: Entry of foreign firms may also lead to improvements in regulation and supervision and the development of a legal framework. Overall, greater

foreign penetration may increase the efficiency and productivity of the domestic market (Leverty, Lin, and Zhou, 2009). Schiro (2006) postulates that market forces lead to more open and transparent consultation, promote dynamic regulation, and foster innovation.

3. Liberalisation of BRICS insurance markets

BRICS is an informal group of states comprising the Federative Republic of Brazil, the Russian Federation, the Republic of India, the People's Republic of China, and the Republic of South Africa. The BRICS together spearhead global economic development and exert significant influence on global politics with their substantial population and natural resource supply. According to Oxford Economics[8], the four big developing economies of BRICS will reach a third (33.28 per cent) of the world's GDP in 2019, measured by purchasing power parity (PPP). According to the IMF, these countries will be the ones pulling global growth by 2025. In 2012, the combined GDP [9] of the BRICS stood at $14,729.95 billion[10] for about 3 billion people, about 42 per cent of the world population. GDP per capita of these countries is steadily increasing, even if it is expected to remain well below that of most developed countries until 2050. According to the World Bank estimates, China and India, as the dominant economic powers, will overtake the US as of 2025 and 2050, respectively, a dynamism that is likely to lead to strong development of the insurance business.[11]

According to Deloitte[12], the insurance sector will see the most significant change from the adoption of block chain technology. With block chain and big data, insurers can reduce the uncertainty of their risk pool system. One of the main uses for block chain in Asia will be to synchronise product and customer information between banks and insurance companies. Other potential uses include tracking goods that are covered by insurance companies and detecting duplicated claims.

In this section, we discuss the insurance sector in each of the BRICS countries and the impact of liberalisation on these markets. Studying the impact of liberalisation of the insurance sector on BRICS will provide not only a case study of significant global economic powers, but also help us understand the liberalisation of India's insurance sector better, since India is at a similar stage of economic development and as these countries.

3.1 Brazil

The first branches of foreign-based insurance companies appeared in Brazil as early as 1862. In the middle of the last century, following a nationalist government agenda, Brazil started closing down the economy to foreigners, and the insurance sector followed suit. Instituto de Resseguros do Brasil (IRB), founded in 1939, had full regulatory control of the insurance

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8 https://www.gfmag.com/magazine/may-2019/growth-rebounding-brics Accessed on 9 September, 2019.

9 At current prices

10 GDP (current prices) for Brazil, Russia, India, China, and South Africa has been sourced from the International Monetary Fund's World Economic Outlook Database (October 2013).

11 https://www.atlas-mag.net/en/article/insurance-in-the-brics-part-one Accessed on 11 February, 2020.

12 https://www.scmp.com/business/banking-finance/article/2110277/insurance-business-will-see-biggest-impact-blockchain-says, accessed on 13 August 2019.

business and a monopoly on reinsurance business in Brazil for more than half a century. The share of foreign companies in total assets fell from 35.6 per cent in 1939 to 16.7 per cent in 1946 and 14 per cent in 1963, reflecting their loss of business. Foreign direct investment in insurance remained below US$ 90 million in the early 1980s (Masci, 2013).

In the course of the time period spanning across the latter half of the 1980s and the 1990s, new policies allowed foreign participation in the capital of insurance firms, provided this was limited to half the total capital and one third of the voting capital. Measures taken under the new policies included reduction of protection, regulatory overhaul, deregulation and privatisation of state-owned concerns (e.g. industrial firms and providers of utilities), and significant opening of the market to foreign competition. In 1994, Brazil launched the 'Real Plan' to reform the economy. It followed a conventional macroeconomic policy reform encompassing fiscal discipline, a floating exchange rate, and inflation targeting (Masci, 2013). Brazil's list of commitments under the General Agreement on Trade in Services of WTO included allowing participation of foreign capital in insurance, reinsurance, and brokerage activities, pending the approval of legislation by Congress. After 1996, Brazil began permitting entry of foreign insurance companies and significant mergers and acquisitions took place between foreign and local insurers. The share of foreign companies in premiums almost trebled from 6 per cent in 1996 to reach 17.9 per cent in 1997 and again doubled to 35.1 per cent in 2002 (Cummins and Vernard, 2008; de Paiva Abreu and Fernandes, 2010). By 2008, Brazil's insurance market became the largest in Latin America, with total premiums of R$ 64.6 billion (US$ 29.6 billion) and technical provisions of R$ 128.4 billion (US$ 60 billion) (Masci, 2013).

In 2008, with the objective of creating a more competitive and free economy, the Brazilian government started a transformation of the structural framework of the market. This "New discovery of Brazil" also passed legislation, providing a new framework for reinsurance business and opened the reinsurance sector to foreign-owned and foreign-based companies (Deloitte, 2011). It ended the monopoly of the Brazilian Reinsurance Institute (IRB). The economic reforms, including an economic stabilisation plan, a deregulation process, the opening of the market to foreign insurers, and the privatisation programme, have had a clear impact on the Brazilian insurance market. Even during the global recession in 2009, the insurance market in Brazil grew consistently. Life insurance premiums grew by 7.8 per cent, to US$ 44 billion (Swiss Re, 2010). The insurance sector evolved from a participation rate of 0.8 per cent in GDP in 1994 to 2.55 per cent in 2008, and the penetration ratio rose to 3.2 per cent in 2008 from 0.7 per cent in 1995.

The progressive opening of the insurance market to foreign companies has not only favoured the growth of insurance in the country, but also has significantly raised the participation of foreign companies in the insurance market, so that in 2008 they represented almost 40 per cent of the market. Although a small percentage of the overall FDI, FDIs in the insurance sector almost doubled since 1995.

During the last ten years, the Brazilian insurance market has continued to expand significantly, with an annual compound growth rate of 10 per cent (IMF, 2018b). This growth, coupled with the increased demand for insurance, has attracted foreign insurance investors into the country's insurance market. In comparison with international markets, Brazil has one of the highest growth rates in insurance premiums worldwide: 12.1 per cent between 2013 and 2014, and 10.2 per cent between 2014 and 2015. The annual growth rate was 16 per cent between 2009 and 2013, if premiums from health insurance are included.

In addition, Brazil's market presents high growth potential for global and local insurers, as total premiums per capita and insurance penetration relative to GDP are still low, compared with developed countries. The process of full acknowledgement of equivalency for the Brazilian insurance market began in June 2015, with the approval of the first stage by the European Commission. Experts think that this decision will most likely benefit Brazilian insurers planning to operate in European markets, as it facilitates operations abroad. Similarly, European companies that operate in Brazil may benefit from lower capital requirements (Bradley, 2019). In the year following the opening of the market, 49 foreign reinsurers got authorisation to start operations in Brazil; in December 2016 this number increased to 132 companies (Cavalcante, Sobreiro, and Kimura, 2018).

3.2 China

The first insurance institution in China was established by foreign insurers in 1805. However, after 1949, all foreign insurers had to terminate operations and leave the country. After nationalisation of all domestic insurance companies, the People's Insurance Company of China (PICC), which was a state monopoly, was established. In 1992, the American International Group, Inc. (AIG) became the first foreign insurer to receive a license to sell individual life insurance by establishing a branch office in China. Foreign insurers and joint ventures were still subject to several regulatory restrictions. They were only allowed to set up branch offices in Shanghai and Guangzhou. As a result, foreign insurers held less than 1 per cent of the nationwide insurance market in 1998, whereas premium income of the top four domestic Chinese insurers accounted for roughly 96 per cent of the total Chinese insurance premiums (Leverty, Lin, and Zhou, 2009).

Since the opening of the economy in the 1980s, the Chinese insurance sector was growing at a rapid rate of 37 per cent, much higher than the economy's GDP growth. But compared to industrial economies and some major regional economies such as Japan, Korea, Australia, and Taiwan, the Chinese insurance market was still underdeveloped. Insurance density and penetration was relatively low (Kellerhals, 2006). In 2000, the aggregate premium income in China amounted to 1.8 per cent of GDP, with an average per capita premium of just over US$ 15. Comparable figures for global insurance activity were 7.5 per cent and US$ 387, respectively, in 1999. The total national premium expenditure in 2000 in China represented only 2.3 per cent of the deposits in the nation's savings banks and only 25 per cent of the Chinese population held insurance policies. As of 1999, only 20 per cent of people in China had joined an insurance scheme. Despite a population of 1.3 billion, China's insurance premium income was only 1.7 per cent of its GNP in 1999 as compared to the world's average of 7.3 per cent. Additionally, the per capita expenditure on insurance premiums was only Renminbi (RMB) 110.58 (approximately equivalent to US$ 13.32) as compared with US$ 430 in the US (Chang, 2004). The state-owned China Reinsurance had a near-monopoly.

China's accession to the World Trade Organization (WTO) on 11 December, 2001 initiated the gradual opening of a monolithic, domestic-oriented, and government-led insurance sector to increased foreign competition (Leverty, Lin, and Zhou, 2009). According to China's WTO Schedule of Commitments, upon WTO accession on 11 December, 2001, foreign financial institutions were permitted to provide foreign currency services to all enterprises, and full-range local currency services to Chinese enterprises within two years after accession. Within five years after accession, foreign financial institutions would have to be permitted to provide local currency services to Chinese individuals as well. In insurance, the main Chinese commitment stood to non-discriminatory licensing for insurance providers and to grant licenses free of any geographical restriction (Mallon and Whalley, 2011). Foreign non-life insurers were to be permitted to establish wholly-owned subsidiaries in two years after accession. Within three years after accession, all the geographic restrictions on foreign insurers were to be lifted completely and the scope of permitted business activities significantly expanded. Foreign life insurers were required to operate on a joint venture basis, with a maximum equity interest of 50 per cent. In 2004, China lifted geographic restrictions in the banking and insurance sectors one year ahead of schedule (Wang, 2006).

China's GATS commitments are one of the most radical services reform programmes negotiated in the WTO (Mattoo, 2003). China agreed to liberalise its banking, insurance, securities, fund management, and other financial services significantly as part of its WTO accession conditions (Das, 2001).[13] Since economic reforms were carried out, the insurance sector in China has experienced strong growth. In 2011, the sector recorded a 6.8 per cent rise in premium income, reaching RMB 969.98 billion (about US$ 154 billion) (Lu, Wang, and Kweh, 2014).

Studies have examined the impact of the WTO accession on the performance of the Chinese insurance sector. The influx of financial capital after the liberalisation had significant positive impacts on firm operating efficiency (Lu, Wang, and Kweh, 2014). Using a dataset from 1999, when China began preparing to enter the WTO, to 2004, Leverty, et al. (2009) examined the impact of relaxing foreign entry restrictions in the financial services industry on firm performance and efficiency. In general, they found that the average efficiency of domestic insurers improved after WTO accession, suggesting that contrary to the Chinese government's concerns, domestic insurers benefit by the entry of foreign competitors. They also found that foreign insurers are more likely to be represented in the "best-practice" frontier, positively influencing performance in the Chinese market. The study also found that regulatory restrictions impede insurer efficiency and productivity.

In 2016, the China Insurance Regulatory Commission (CIRC) began issuing a gamut of regulations intended to reduce excessive risk in the sector. This drive is part of a larger effort by the Chinese government to reduce risk and increase stability in China's financial sector. As

[13] In 2011, the industry recorded a 6.8% rise in premium income, reaching RMB 969.98 billion (about US$ 154 billion) The Chinese insurance industry's underwriting reached US$ 541.45 billion in 2017, up by 16.2% compared to the US$ 466.13 billion reported in 2016, while global premiums increased by only 4% (Lu, Wang, and Kweh, 2014).

part of this large-scale effort, China overhauled its entire financial regulatory system in 2017-2018 and merged the CIRC with China's banking regulator, creating the China Banking and Insurance Regulatory Commission (CBIRC). The new market conditions created by these reforms will be more favourable to foreign insurers and intermediaries, because they play to their strengths.[14]

Around the end of 2017, China announced a series of new measures to open up its financial sector, to lower the threshold for market access, and expand the business scope of foreign investors, including cancelling the requirement that foreign insurers must have a representative office in China for two years before they can establish a commercial presence. Eligible overseas investors are now allowed to engage in insurance agency and insurance assessment businesses. The restrictions on the business scope of foreign invested insurance brokerage companies have been lifted. The foreign equity cap has been raised to 51 per cent in securities, fund management, futures, and life insurance companies, and the three-year limitation has been removed (The State Council Information Office of the People's Republic of China, 2018).

On 1 May, 2019, Guo Shuqing, Chairman of CBIRC, announced 12 new measures that will further open China's US$ 44 trillion financial sector to foreign investment. The CBIRC will allow foreign financial institutions to invest in foreign-invested insurance companies (i.e. companies in which foreign shareholding is already at or above 25 per cent). The CBIRC will also eliminate the requirement that, prior to entering the Chinese market, foreign insurance brokerages should have been in operation for no less than 30 years and have total assets of no less than US$ 200 million. This is a significant change, as it considerably widens the field of foreign brokerages eligible to enter China's market.[15]

As a result of all these reform initiatives, the Chinese insurance sector's underwriting reached US$ 541.45 billion in 2017, up by 16.2 per cent compared to the US$ 466.13 billion reported in 2016, while global premiums increased by only 4 per cent. With these results, China's insurance market currently ranks second worldwide after the US (US$ 1,377 billion). It is ahead of Japan with US$ 422.05 billion and the UK with US$ 283.33 billion in premiums.[16] According to Swiss Re Institute, China's insurance market will quadruple in 14 years to US$ 2.36 trillion.[17]

3.3 India

In life insurance business, India is ranked 10th among the 88 countries, for which data is published by Swiss Re. India's share in global life insurance market was 2.8 per cent during

[14] https://practiceguides.chambers.com/practice-guides/insurance-reinsurance-2019/china/trends-and-developments Accessed on 13 August, 2019

[15] https://www.winston.com/en/thought-leadership/cbirc-announces-new-reforms-aimed-at-further-opening-chinas-insurance-industry-among-other-sectors.html Accessed on 13 August, 2019

[16] https://www.atlas-mag.net/en/article/the-chinese-insurance-market-in-figures-1980-2017 Accessed on 13 August, 2019

[17] https://www.scmp.com/business/article/2189033/china-will-become-worlds-biggest-insurance-market-mid-2030s-speeding-past Accessed on 13 August, 2019

2017. The share of Indian non-life insurance premiums in global non-life insurance premiums was at 1.1 per cent and India ranked 15th in global non-life insurance markets (IRDAI, 2018).

The Government of India announced several initiatives over the last couple of years to globally integrate and boost the insurance sector. The significant milestones of nationalization, privatization and liberalisation have been discussed in Ray, et al., (2020a). Other significant changes include constitution of the Insurance Regulatory and Development Authority of India (IRDAI) (in 1999), opening up of the sector to both private and foreign players (in 2000), and increase in the foreign investment cap to 49% from 26% in 2015. The recent notification of 100% foreign direct investment (FDI) for insurance intermediaries (announced in the Budget of 2019-20) has further liberalised the sector (Ray et al., 2020b).

The Insurance Laws (Amendment) Bill, 2015 was passed by the Lok Sabha on 4th March, 2015 and by the Rajya Sabha on 12th March, 2015. The passage of the bill paved the way for major reform related amendments in the Insurance Act, 1938, the General Insurance Business (Nationalisation) Act, 1972, and the Insurance Regulatory and Development Authority (IRDA) Act, 1999 (Ray, et al., (2020a). It also provides for enhancement of the foreign investment cap in an Indian insurance company from 26% to an explicitly composite limit of 49% with the safeguard of Indian ownership and control. The increase in the foreign investment cap has increased capital inflow in the sector. Big brands like Reliance, Birla, ICICI, Tata, HDFC, Aviva, ING Vysya, etc. have tied up with foreign insurance partners (Yadav and Mohania, 2016).

With the increase in foreign direct investment to 49 per cent, more companies would enter the insurance sector, which would lead to higher competition and cheaper insurance premium for the customers. With higher capital inflow, the insurance companies will be able to create more jobs to meet their targets of venturing into under insured markets through improved infrastructure, better operations, and more manpower. With more players in this sector, there will be stringent competition, leading to competitive quotes, improved services, and better claim settlement ratio. Increased FDI limit will strengthen the existing companies and will allow the new players to come in, thereby enabling more people to buy life cover. The end beneficiary of this amendment will be the policyholders (Hasan, 2015).

Allowing entry of foreign reinsurers in India through branch office presence is expected to provide Indian insurers with the required reinsurance support and underwriting expertise to be able to offer title insurance covers in the Indian market. With foreign reinsurers in the process of opening branches in India, Indian insurers will have access to abundant reinsurance capital, along with alternative capital, for their risk transfer needs (BCG and FICCI, 2017).

But there are still key barriers for foreign participation in India's insurance market, particularly in terms of ownership restriction, complexity of approvals, price restriction, barriers to diversification, and difficulty of exiting the market. The new measure thus resulted in the displacement of existing investors rather than expanding the equity base of the target insurance companies. Seventy per cent of the investment in the insurance sector was in the form of replacing the existing investors, thus resulting in changed ownership patterns following the hike in the cap on foreign share from 26 per cent to 49 per cent. Thus, net addition to the investment in the sector would have been quite small.

3.4 South Africa

The first South African insurance company, the Zuid-Afrikaansche Brand en Levensversekering Maatschappij was founded in Cape Colony in December 1835. By 1861, more than 20 British-owned insurance companies operated in the Cape. After the mineral discoveries in the late 1860s, many UK companies extended their business to Johannesburg. Various Australian, American, and New Zealand insurance concerns also sought to benefit from the rapidly growing urban population and the high risks associated with the mining industry. By the middle of the 20th century, the insurance market was well established in the Union of South Africa, its distribution being overseen primarily through company agents. The South African insurance market was modern and competitive, non-discriminatory towards foreign companies, and operated in a free market economy in the first half of the 20th century. The First Union Insurance Act 1923 combined aspects of the regulatory framework for insurance markets in the UK, the US, and Canada, allowing foreign firms operating in South Africa the freedom to provide cover for policies from their investments in their home countries (Verhoef, 2013).

In 1973, the Report of the Commission of Enquiry into Fiscal and Monetary Policy in South Africa (Franszen Commission) recommended that no new foreign controlled companies be permitted to enter the South African market with more than a 10 per cent foreign shareholding. The changes were introduced in the amendments to the Companies Act No 61 of 1973, as amended by Act 76 of 1974, with the result that banks and insurers operating in South Africa had to register and comply with the requirements for locally incorporated companies. Foreign insurance companies who wanted to conduct business were given a three-year period to do so. The changes in the statutory environment had a profound impact in reducing the number of foreign companies doing business in South Africa. In 1955, a total of 176 foreign insurance companies did business. By 1975 this number had contracted to 99. The long-term insurance sector and the banking sector operated in the confined domestic market between the mid-1970s and the late 1990s, when legislation finally opened the South African financial markets to international competition. The collapse of AA Mutual in 1986 prompted the government to appoint the Melamet Commission, a Commission of Inquiry that investigated the reasons for the failure. The Melamet report advised new financial services control, prompting the promulgation of the Financial Services Board Act No 97 of 1990, and leading to the establishment of the Financial Services Board (FSB).

The South African insurance market is still dominated by South African companies, both in the long-term as well as in the short-term markets. The Insurance Acts only permit the operation of foreign insurers in South Africa through the setup of a wholly owned subsidiary. Only a few international companies entered the market after the financial liberalisation of the early 1990s. Among them are Winterthur Insurance Company (Ltd.) from Switzerland, Allianz from Germany, St. Paul’s Insurance Company SA Ltd. from the US, and Pinnafrica Insurance Ltd. from the UK.

Alhassan and Biepke (2017) examined the effect of three outcomes of liberalisation, that is, creation of large firms through consolidation, increased foreign presence in local markets, and freedom of diversifying into wider scope of activities, on the competitiveness of the largest non-life insurance market in Africa. They found evidence that the presence of foreign firms in domestic markets improves industry competitiveness. The study explains the monopolistic tendencies of domestic insurers by the tight exchange controls and regulatory restrictions on foreign participation in the insurance markets.

Butterworth and Malherbe (1999) attributed higher price competition, improved product offering and service quality, and product development to the presence of foreign firms in the South African insurance market. "In general, foreign entry has accelerated innovation, increased product choice, improved regulatory standards and intensified demand for financial talent. In some cases, price competition has become more fierce."

The introduction of the Insurance Act, no. 18 of 2017 which came into effect on 1 July, 2018 allows for branches of foreign reinsurers to be opened in South Africa (KPMG, 2018).

3.5 Russia

The financial services sector in Russia is comparatively nascent. During the USSR period, the range of insurance services had been extremely narrow and such services had been strictly provided by monopolistic state companies such as Savings Bank of USSR in the area of retail banking services, Gosstrakh [State Insurance] of the USSR in the area of property insurance, etc. Instability, crises, and economic decline in the 1990s, as well as negative consequences of radical market reforms, resulted in mistrust towards banking, insurance, and other financial institutions formed during this decade (International Trade Centre, 2012).

In Russia, the insurance sector has faced a number of barriers and as a result growth has been slower. The Soviet government abolished the state monopoly for insurance in 1988. But the ending of the state monopoly was not accompanied by a sound legal and regulatory framework, without which the initial development of insurance was haphazard. When the first steps in regulation were introduced in 1995, over 1,500 insurance companies had already been founded. Most companies at that time acted mainly as "captive" insurers for their owners' business and most business was not real insurance at all but used schemes to help the owners reduce their tax. As late as 2005, it was calculated that over two thirds of the income of the insurance sector was derived from tax reduction schemes. At the peak of the market, many of the developing industrial and financial groups set up insurance companies. Alfa, Interros, and Gazprom are some examples which have managed the transition to a better-regulated market.

The retail insurance sector finally began to take off following the introduction of compulsory motor liability insurance (known in Russia as OSAGO) in July 2003. Within a year of the introduction, Russian insurance companies had sold over 25 million policies; over 800,000 accident victims had received compensation of over 18 billion roubles. As the market began to take off, international insurance companies began to take an interest in Russia, a market where barriers to international entry were low. AIG and Allianz had entered Russia in the early 1990s;

they were followed by others ten years later. However, many of these latecomers did not have a smooth run. Many did not understand the nature of the market with many financial schemes and many paid too much for companies that had little real business. By 2014, when OSAGO results worsened, many insurance companies had had enough and exited the market. Currently, the share of the market controlled by foreign-owned companies is well below 10 per cent.

In 2012, the Central Bank of Russia took over the regulation of the insurance sector. The Bank is using its experience of regulating the banking industry to enforce capital regulation on Russian insurance companies and to improve the overall system of regulation. The number of insurance companies is falling fast and those remaining are much better managed and regulated.[18]

According to the World Economic Forum, Russia holds the 127th place in the world by the level of financial sector development (Gnevko, et al., 2016). Experts in the insurance field consider the entry of foreign insurance companies will augment participation in the insurance market and will also possibly improve service quality. An increase in the role of foreign insurers may cause substantial cost reductions for the insurance services (Zemnitskiy, 2001). Similar optimism is felt about liberalisation of reinsurance.

The impact of liberalisation of the insurance sector in the BRICS is presented in Figure 1.

[18] http://www.russiaknowledge.com/2017/10/12/the-russian-insurance-market-an-overview/ Accessed on 14 August, 2019.

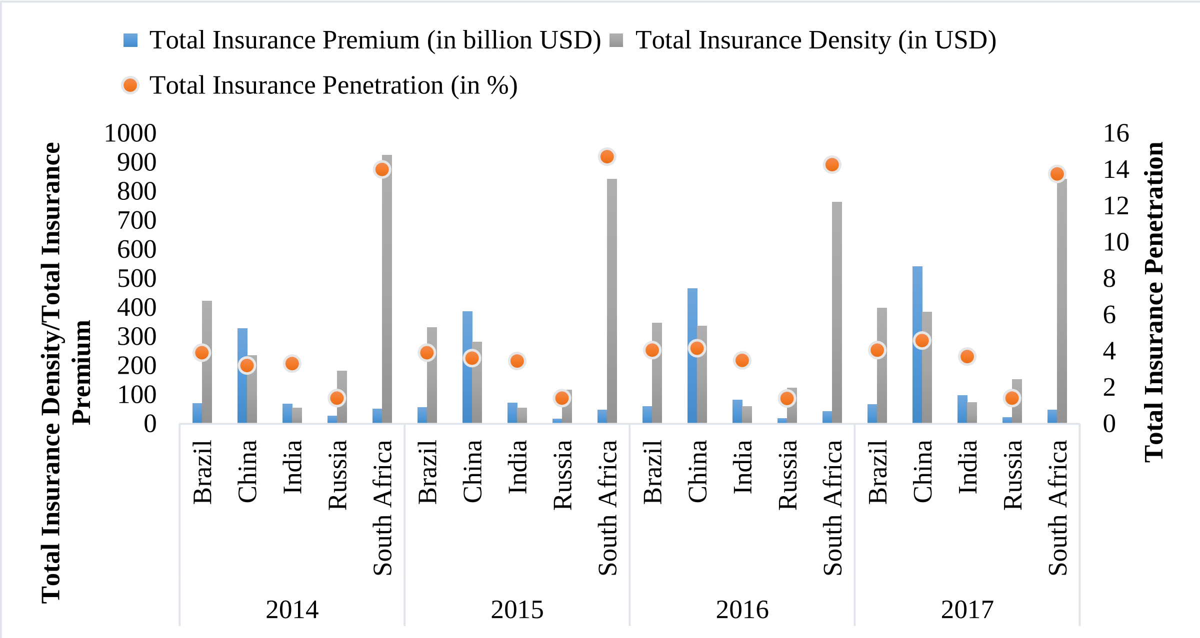
Figure 1: Liberalisation impact on BRICS's insurance sectors: A snapshot

Brazil	Russia	India	China	South Africa
• Progressive opening up of the Brazilian insurance sector has helped in growth and expansion of its insurance sector. • The insurance sector evolved from a participation rate of 0.8% of the GDP in 1994 to 2.55% in 2008, and the penetration rate rose to 3.2% in 2008 from 0.7% in 1995. • Brazil emerged as the country with one of the highest growth rates in insurance premiums worldwide: 12.1% between 2013 and 2014, and 10.2% between 2014 and 2015.	• Experts in the insurance field have opined that the entry of foreign insurance companies will augment participation in insurance market and will also possibly improve service quality. • An increase in the role of foreign insurers may cause substantial cost reductions for the insurance services (Zemnitskiy, 2001).	• Significant capital flows to the insurance sector due to the earlier FDI limit hike. • Opening up of the sector has also been beneficial in terms of penetration and density, product innovation, introduction of alternate channels, distribution, customer services, and a better array of services at competitive prices has been provided by foreign players' entry (Srivastava and Tripathi, 2012; Rao, 2005; Dubey, 2005; Bajpai, 2006; Pamecha and Chhajer, 2013). • Life insurance business has also experienced some gains.	• Opening up of the Chinese economy has brought strong growth for the insurance sector with the premium income experiencing an uptick. • Average efficiency of domestic insurers improved after the WTO accession and foreign insurers are more likely to be represented in the ''best-practice'' frontier, positively influencing performance in the Chinese market (Leverty, Lin, and Zhou, 2009), and financial capital influx after liberalisation had significant positive impacts on firm operating efficiency (Lu, Wang, and Kweh, 2014).	• Presence of foreign firms in domestic markets improves industry competitiveness and the the monopolistic tendencies of domestic insurers can be explained by the tight exchange controls and regulatory restrictions on foreign participation in the insurance markets (Alhassan and Biepke, 2017). • Higher price competition, improved product offering and service quality, and product development have been attributed to the presence of foreign firms in the South African insurance market (Butterworth and Malherbe, 1999).

Source: Adapted from Ray et al., (2020c) and further compiled by authors' from various sources

The following graph shows the key insurance sector trends in the BRICS countries in the last few years. Unfortunately, in comparison with the other BRICS nations, it is clear that India is a laggard in terms of insurance penetration and density, in both the life and non-life segments.

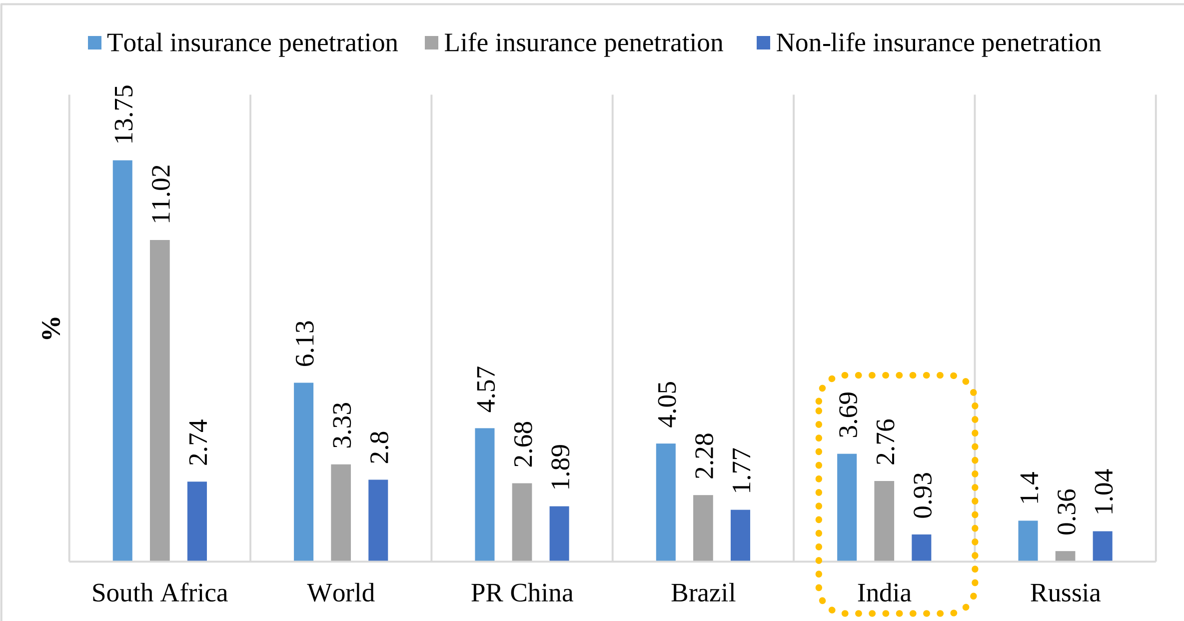
Figure 2: Insurance Sector Key Trends – BRICS



Note: Data for India pertains to the financial year.

Source: OECD.Stat; Swiss Re; IRDAI (2019a)

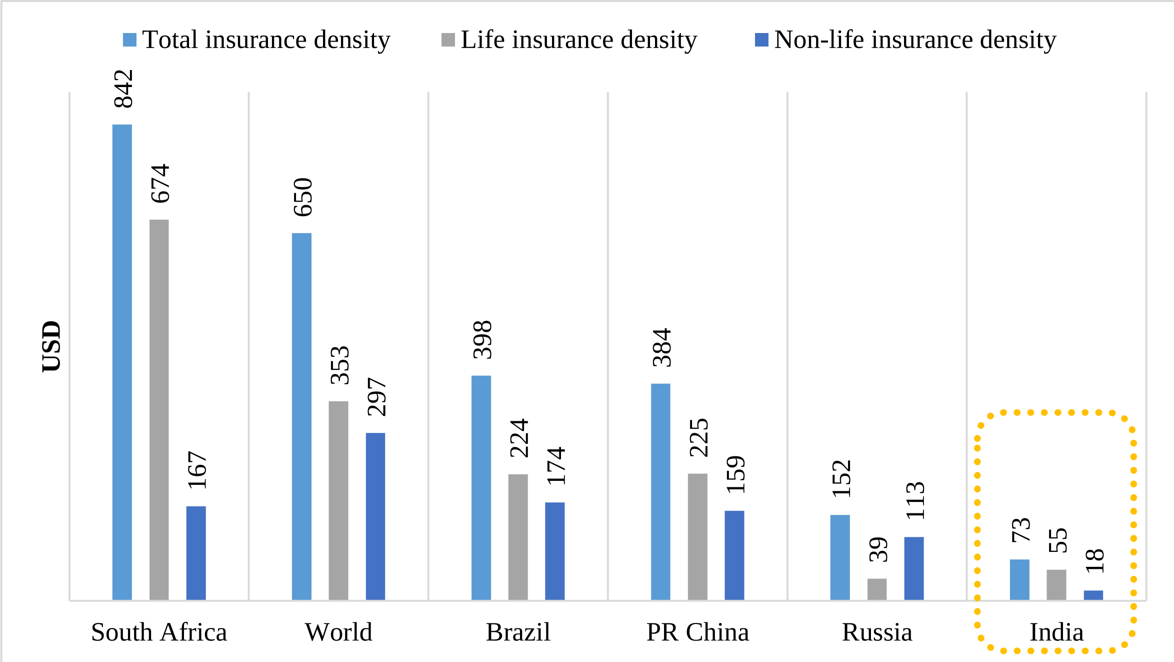
Figure 3: Life and Non-Life Insurance penetration: BRICS and the World (2017)



Note: Data for India pertains to the financial year.

Source: IRDAI (2019a)

Figure 4: Life and Non-life Insurance density: BRICS and the World[19] (2017)



Source: IRDAI (2019a)

4. Hindrances to foreign investment in Indian insurance and reinsurance sectors

In 2015, the foreign investment cap was raised from 26 per cent to 49 per cent. With the increase in foreign direct investment to 49 per cent, it was expected that more global insurers will enter the sector, which would lead to higher competition and cheaper insurance premiums for customers. With higher capital inflow, insurance companies will be able to create more jobs to meet their targets of venturing into underinsured markets through improved infrastructure, better operations, and more manpower. With more players in this sector, there will be stringent competition, leading to competitive quotes, improved services, and better claim settlement ratio. The end beneficiary of this amendment will be the policyholders (Hasan, 2015).

Recently, there has emerged a possibility that the insurance sector can be opened further by raising the said limit to 74 per cent under the approval route (Seth, 2019). Studies (Parida, 2014; Ansari and Rehmani, 2016) have estimated how much capital may flow into the sector through foreign investments. They considered two scenarios: first, disinvestment of the Indian promoter’s stake to 51 per cent from 74 per cent; or second, by keeping the Indian promoter’s stake at the current level (in amount), but enhancing foreign investment, so that the new ratio of domestic and foreign insurers’ stakes would be at 51:49. Ansari and Rehmani (2016) estimated the additional capital flows to the insurance sector due to the FDI limit hike. Here Scenario II embodies issue of fresh shares for extra foreign investments, whereas Scenario I showcases allowing domestic promoters to divest their stake in insurance companies. If the Government favours the second scenario, insurance companies may receive around Rs 15187

19 Density in India relates to the financial year.

crore additional foreign investment. However, if the Government favours Scenario I, an estimated additional investment of Rs 8727 crore may flow to the sector through foreign investments. However, in this scenario the objective of a hike in FDI limit may not be achieved, as the capital base will remain the same and the insurers will not be able to expand their footprint to achieve the national agenda of financial inclusion.

Evidence of benefits of liberalisation of India's insurance sector can be seen in the sector's functional performance indicators, such as penetration and density, product innovation, introduction of alternate channels, distribution, and customer services (Srivastava and Tripathi, 2012; Rao, 2005; Dubey, 2005; Bajpai, 2006). Recent reforms in India's insurance sector including allowing 49 per cent foreign direct investment (FDI) have increased capital inflow in the sector. Big brands like Reliance, Birla, ICICI, Tata, HDFC, Aviva, ING Vysya, etc. have tied up with foreign insurance partners (Yadav and Mohania, 2016).

Vadlamannati (2008) examined the contribution of insurance sector growth to economic development in India. Using panel data from 1980 to 2006, they estimated seven regression models and found both life and total insurance sectors' growth influence economic development, but the effects of non-life insurance sector growth are felt only after a year. The results also showed that the rate of growth of insurance sector reforms directly influences economic development, although the reforms themselves only affect economic development after a year.

Narayanan (2009) and Prabhakara (2010) studied technological development in the insurance sector and observed substantial changes in terms of greater use of computerisation and information technology. Introduction of technology also eased the entry of private players into India's insurance market (Choudhuri, 2013). Pamecha and Chhajer (2013) stated that the entry of foreign players in the insurance sector has provided a better array of services for the customers at competitive prices.

4.1 Impact of FDI on India's life insurance sector

After opening, the Indian life insurance sector has been forced to face a lot of competition from many national as well as international private insurance players. Chandrapal (2019) examined the impact of liberalisation on the Indian life insurance sector in terms of efficiency characterised by functional performance. Three major areas of functional performance, namely marketing mix, service quality, and insurance awareness were measured across the groups. Service quality and insurance awareness were found to be weaker than the marketing mix and this is a challenge. There was a huge growth in business; however, the penetration and density did not increase as expected as per the recommendations of the Malhotra Committee.

Kulkarni (2017) performed a detailed evaluation of the performance of the life insurance sector in India in the post-liberalisation period by focusing on the financial performance of private sector life insurance firms and found that the increase in the number of firms and a competitive market has not resulted in bettering the low level of life insurance development in India. Similar conclusions were reached by Kumari (2013). The overall business of life insurance significantly increased after privatisation, but still a huge Indian population remains uninsured (Rajendran and Natarajan, 2010). Analysing the performance of LIC during the post-reform period, Rajendran and Natarajan (2010) found business in India and outside India, as well as the total businesses of LIC, are always in an increasing trend. This proves that liberalisation, privatisation, and globalisation had a positive influence on the performance of LIC.

4.2 Impact of FDI on India's non-life insurance sector

Pal, et al. (2017) investigated the performance of non-life insurers from 2000-2001 to 2014-2015 to forecast the performance of non-life insurers in the next 10 years until 2025-2026. The results show that public non-life insurance companies might start earning Rs 1 lakh crore premium revenue by 2022-2023. The non-life insurance sector (both public and private together) might fetch Rs 1 lakh crore premium revenue by 2019 and Rs 2 lakh crore as premium revenue from FY2024, giving a huge boost to the economy. According to the forecast results, the public insurance companies' combined ratio value could be 110, while private non-life insurance companies could attain a combined ratio of around 102 due to their optimised operational capabilities.

Garg and Deepti (2008) show that although private firms at that time were lagging behind public firms, they were fast catching up, and the competence scores of public and private firms seem to converge. Singh and Kumar (2011) analysed the efficiency of the public sector General Insurance Companies pre-reform (1993-94 to 1999-00) and post-reform (2000-01 and 2007-08) and concluded that the competence of the public sector general insurance firms is higher in the post-reform period, than in the pre-reform period.

The ensuing sections elucidate liberalisation's impact on India's insurance sector, both life and non-life. However, it is crucial to note at this juncture that opening the insurance sector can affect life and non-life insurance segments in different ways owing to their distinct structures. The simple regression exercise in Ray, et al. (2020a) for the Indian case for the time period 1990-91 to 2017-18 provides some evidence in this regard. Ray, et al. (2020a) find that liberalisation influences positively life (with a coefficient of 1.45) and total insurance penetration rates (with a coefficient of 1.38) whereas its impact on non-life insurance penetration rates is negative, as well as statistically insignificant, with a coefficient of -0.05.

4.3 Hindrances to foreign investment in Indian insurance and reinsurance sectors

The impact of the recent reforms is already evident in the growing trajectory of life and non-life insurance market in India, although the penetration and density in both markets are quite low in comparison to developed countries. Even following considerable reforms and a movement towards a more open and globally integrated insurance sector, there remain key challenges and barriers for foreign insurers to operate in India profitably. In particular, barriers remain in terms of ownership restriction, price restriction, barriers to diversification, and difficulty in exiting the market.[20]

I. Ownership restrictions: The Insurance Act 2015 created a requirement that an "Indian Insurance Company" (one incorporated under the India Companies Act) be "Indian owned and controlled." (IMF, 2018a). The Insurance Act 2015 allows a foreign insurance company to set up a business in India only by establishing a licensed local insurer through a joint venture with one or more local partners. It provides the Indian company the right to appoint a majority of the directors or to direct management and policy decisions.[21]

II. Limits on diversification: The definition of an insurance company under Indian law also specifies that the sole purpose of an Indian insurance company is to conduct insurance business. Therefore, insurers only have permission to undertake activities that are incidental to or supplement the provision of insurance, which stymies their diversification agenda, if any. Also, under Indian law, a foreign firm can have a stake in only one domestic insurer in the same space. This provision reduces a foreign insurer's market share and hinders its ability to raise capital and diversify operations.

III. Price restrictions: In India, there is also a ceiling on the maximum price any outgoing foreign shareholder can achieve for its shares in the joint venture, thus limiting its profit on sale. The price of shares in a transfer from a foreign insurer to an Indian resident cannot exceed fair value, which is determined by a chartered accountant or merchant bank.

Due to all these regulatory burdens, many foreign companies entering the Indian insurance market have faced significant difficulties in turning a profit in joint ventures in both life insurance and non-life sectors. Moderate to heavy losses and slow premium growth have led several foreign joint ventures to exit the Indian life insurance market. In January 2015, UK-based life insurer Aviva appointed JP Morgan and Deutsche Bank to sell its stake in the Indian joint venture Aviva Life Insurance. When ING and New York Life exited life insurance joint ventures in India, ING sold its 26 per cent stake for a loss and New York Life sold its 26 per cent stake for only the estimated present value of future profits in the company. In 2012, HSBC put its life insurance business in India up for sale, but was unable to sell it.

The Insurance Laws Amendment Act 2015 allowed foreign reinsurers to open branch offices in India. The act permitted foreign reinsurers to legally conduct insurance business in India without an Indian partner. However, foreign reinsurance companies must wait for the insurance regulator to provide guidance on minimum capital requirements, profit repatriation, and related issues. The regulatory changes in the recent past have paved the way for the entry of new entities like Lloyds India and Foreign Reinsurers' Branches (namely Swiss Re, Munich Re, SCOR SE, RGA, Hannover Re, XL Catlin, Gen Re, etc.). These branches are required to retain a minimum of 50 per cent of Indian business. The Indian reinsurance sector now has a good

[20] https://www.india-briefing.com/news/investing-indias-insurance-industry-10856.html/ Accessed on 28 August, 2019.

[21] https://www.india-briefing.com/news/investing-indias-insurance-industry-10856.html/ Accessed on 28 August, 2019.

number of players to promote a healthy and competitive market for reinsurance. Some experts also hope that the capacity will increase, which will result in the establishment of a reinsurance hub in India soon (IRDAI, website).

The IRDAI (Reinsurance) Regulations 2018 were notified on 12 December, 2018 and came into force on 1 January, 2019. These regulations consolidated the provisions governing reinsurance business in India into one set of applicable regulations, along with introducing new requirements for both life and general reinsurance business. The new set of regulations also repealed the previous regulations applicable to reinsurance (i.e. the IRDAI (General Insurance - Reinsurance) Regulations, 2016 and the IRDAI (Life Insurance - Reinsurance) Regulations, 2013.) It proposed key changes to the IRDAI (Registration and Operation of Branch Offices of Foreign Reinsurers other than Lloyds) Regulations, 2015 (FRB Regulations), and IRDAI (Lloyds India) Regulations, 2016 (Lloyds Regulations). The Draft Regulations seek to do away with different categories (i.e. Category I and Category II) of applicants mentioned under the FRB Regulations and Lloyds Regulations. It proposed that an applicant shall make a requisition for registration application for reinsurance business, wherein the branch office of a foreign reinsurer (FRB) shall maintain a minimum retention of 50 per cent of the Indian reinsurance business.[22]

5. Ease of Doing Business (EODB) and the insurance industry

Doing Business, an index published by the World Bank, captures several important dimensions of the regulatory environment affecting domestic firms by providing quantitative indicators to these dimensions. Ten of these areas – starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency – are included in the ease of doing business score and ease of doing business ranking. Besides, Doing Business also measures regulation on employing workers and contracting with the government, but which are not included in the ease of doing business score and ranking.[23]

A body of research supports the existence of an important and robust relationship between the business regulatory environment and economic outcomes (Haidar, 2012). The Doing Business Index points to practical areas which are important to multinational companies, such as the time it takes to compute and pay taxes, which the government can control. Piwonski (2010) argues that by increasing their country's Doing Business rank one level, a government can bring in over US$ 44 million.

Reforms in the financial sector, including the insurance sector, can greatly improve the ease of doing business ranking. It is documented that opening the insurance sector to foreign

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22 https://www.pwc.in/assets/pdfs/newsalert/2018/pwc_news_alert_9_january_2018_irdai_issues_draft_irdai_reinsurance_regulations_2018.pdf Accessed on 28 August, 2019.

23 The World Bank has recently suspended its Doing Business Report 2018 and Doing Business Report 2020 citing irregularities. https://www.thehindubusinessline.com/economy/world-bank-suspends-ease-of-doing-business-report/article32462039.ece

participants increases the insurance penetration, positively influences the business environment, and increases capital flow in the market for domestic firms.

Table 1 lists the topics and indicators on whose basis economies are ranked for the EODB. A high EODB ranking means the regulatory environment is more conducive to the starting and operation of a local firm. The rankings are determined by sorting the aggregate scores on 10 topics, each consisting of several indicators, giving equal weight to each topic.[24]

Table 1: Ease of doing business topics and indicators

Indicator set	*What it measures*
Starting a business	Procedures, time, cost, and paid-in minimum capital to start a limited liability company for men and women
Dealing with construction permits	Procedures, time, and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system
Getting electricity	Procedures, time, and cost to get connected to the electrical grid; the reliability of the electricity supply; and the transparency of tariffs
Registering property	Procedures, time, and cost to transfer a property and the quality of the land administration system for men and women
Getting credit	Movable collateral laws and credit information systems
Protecting minority investors	Minority shareholders’ rights in related-party transactions and in corporate governance
Paying taxes	Payments, time, and total tax and contribution rate for a firm to comply with all tax regulations and post-filing processes
Trading across borders	Time and cost to export the product of comparative advantage and to import auto parts
Enforcing contracts	Time and cost to resolve a commercial dispute and the quality of judicial processes for men and women
Resolving insolvency	Time, cost, outcome, and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency
Employing workers	Flexibility in employment regulation
Contracting with the government	Procedures and time to participate in and win a works contract through public procurement and the public procurement regulatory framework

Source: World Bank (2020a)

5.1 Insurance sector performance and EODB rankings

Insurance can directly affect the rankings of individual indicators as well as the overall country rank. Via its role in the macroeconomic development of an economy, a strong and healthy insurance sector can facilitate growth of enterprises by improving the overall business climate.

Starting a business: One of the procedural indicators of starting a business in the EODB index is to establish the obligation of payment of employees’ social insurance and to apply for registration for qualified personnel and for social insurance coverage registration. Creating one-stop windows and simplified insurance coverage registration can improve the procedure of starting a business and reduce the time and cost, leading to a higher score.

[24] https://www.doingbusiness.org/en/rankings

Dealing with construction permits: One component of this indicator is the building quality control index (0-15), which is the sum of the quality of building regulations, quality control before, during and after construction, liability and insurance regimes, and professional certifications indices. The liability and insurance regimes are key requirements for safe buildings (World Bank, 2019a). The company is assumed to take up all necessary insurance applicable to its general business activity (for example, accidental insurance for construction workers and third-person liability). The liability and insurance regimes index ranges from 0 to 2with higher values indicating more stringent latent defect liability and insurance regimes.

Getting electricity: In some economies, the security deposit for utilities (e.g. electricity) can be put up in the form of a bond. The company can obtain the bond from a bank or an insurance company as a guarantee issued on the assets it holds with that financial institution instead of paying the deposit in cash. In this case, the company does not lose ownership control over the full amount and can continue using it (World Bank, 2019a).

Registering property: This indicator assesses the efficiency of the property transfer system and the quality of land administration. One of its components, land dispute resolution index, evaluates the legal framework for immovable property registration and the accessibility of dispute resolution mechanisms. To increase the security of property transactions and to save purchasers "the trouble and expense of going behind the Register to investigate the history of the vendor's title and to satisfy themselves of its validity", buyers can purchase title insurance. If an acquired title has defects, title insurance compensates for any financial loss incurred by the buyer (World Bank, 2019a).

Getting credit: Insurance reform can make getting credit easier for the business owner by providing easy online access for subscribed banks and financial institutions.

Trading across borders: The Doing Business index measures the time and cost (excluding tariffs) associated with three sets of procedures – documentary compliance, border compliance, and domestic transport – within the overall process of exporting or importing a shipment of goods. To incentivise the buyers to get the necessary insurance, the indicator excludes the insurance cost from the costs calculated, thus raising the ranking.

Enforcing contracts: It measures the time and cost for resolving a commercial dispute through a local first-instance court and the quality of judicial processes index, the enforcing contracts indicator evaluates whether each economy has adopted a series of good practices that promote quality and efficiency in the court system. High litigation cost can bring down the ease of doing business. To remedy this, obtaining liability insurance is helpful. Liability insurance provides the insured party with protection against claims resulting from injuries and damage to people or property. Liability insurance policies cover both legal costs and any pay-outs for which the insured party would be responsible if found legally liable. These insurances include products such as directors' and officers' liability, professional indemnity, and comprehensive general liability.

Paying taxes: The Doing Business measure of paying taxes includes government-mandated contributions paid by the employer to a requited private pension fund or workers' insurance fund. It includes, for example, Australia's compulsory "superannuation guarantee" and workers' compensation insurance (World Bank, 2019a). It also sees that the company pays for additional medical insurance for employees (not mandated by any law) as an additional benefit. Countries have successfully improved their EODB ranking by simplifying their tax paying process with the help of improved insurance sector policies. For example, Bahrain made paying taxes easier by implementing electronic payment of social insurance contributions. Romania made paying taxes less costly by eliminating five employer-paid taxes and contributions. Ecuador made paying taxes easier and less costly by discontinuing the solidarity contributions introduced in 2016 and by allowing employers to deduct an additional 100 per cent on amounts paid to cover private medical insurance (World Bank, 2019a).

Resolving insolvency: How quickly and efficiently firms can resolve insolvency issues signals the ease of doing business in an economy. Trade Credit insurance, which is designed to cover bankruptcy, can help in this regard. This specific insurance pays the outstanding amount if a borrower defaults or delays beyond a certain period.[25]

Employing workers: Flexibility in employment regulation is an indicator of a healthy labour market and the business environment of an economy. Prevalence of labour market regulations, such as availability of fixed-term contracts, redundancy rules, severance pay, and unemployment insurance differ across different income groups of economies. Doing Business data show that low- and lower-middle-income economies tend to have more rigid employment protection legislation compared to more developed economies. One reason for more rigid employment protection legislation in low- and lower-middle-income economies is the lack of unemployment insurance. None of the low-income economies and only 23 per cent of lower-middle-income economies have unemployment protection by law. Most economies (79 per cent) mandate severance payments for redundancy dismissals (World Bank, 2016). However, severance payments are a weak mechanism for income loss mitigation and are no substitute for unemployment insurance, since these payments are fixed irrespective of duration and severity of the workers' financial situations. At the same time, they can also be damaging for domestic small and medium-size enterprises facing economic difficulties, since in some economies, severance payments approximate or even exceed one year of salary. On the other hand, unemployment insurance pools risk by allowing resources to be accumulated in good times and released in times of hardship and provides a very effective mechanism for income protection (World Bank, 2016).

5.2 BRICS and Ease of Doing Business rankings

Brazil: "Brazil carried out a record number of business reforms in the past year to help create jobs, attract investment and become a more competitive economy".[26] Registering the

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25 https://www.livemint.com/Money/3tZg2NSgzQX3WIgSN2sgJL/How-insurance-can-improve-the-ease-of-doing-business.html

26 https://www.worldbank.org/en/news/press-release/2018/10/31/doing-business-report-brazil-steps-up-reform-agenda-carrying-out-record-business-reforms

employees in a social integration programme intended to identify workers with the social security system so that they may request unemployment insurance and, if needed, benefit from the unemployment guarantee fund, takes only one day and costs nothing (World Bank, 2020b). But there are other insurance sector areas where Brazil needs improvement. In the dealing with construction permits category, no party is required by law to obtain an insurance policy to cover possible structural flaws or problems in the building once it is in use.

Russia: Although Russia holds quite a high ranking in the EODB index (28), the insurance sector does not have much contribution in that performance. Russian liability and insurance regimes index (0-2) gets only 1, because no party is required by law to obtain insurance. On the positive side, Russia does have a quite advanced unemployment benefit system and social security (World Bank, 2020a).

India: India was among the 10 economies acknowledged by Doing Business that improved the most on the ease of doing business after implementing regulatory reforms. Introduction of decennial liability and insurance has made building quality control better[27] and has positively impacted the parameter of "Dealing with Construction Permits" (World Bank, 2019b). Besides, the process of obtaining a construction permit in India has been made faster and less expensive by streamlining the associated process (World Bank, 2019b). India has made paying taxes easier by introducing an electronic system for paying employee state insurance contributions.

With a rank of 166, "Registering Property" is the category for India to work on. Title insurance can lend support in this context by indemnifying against financial loss due to defects in title to a property. Currently, title insurance products are offered by only a few general insurers in the Indian insurance sector. High variability has been observed in the available products with respect to coverage and terms and conditions based on the support received from their reinsurers. To standardise title insurance products, IRDAI has recently decided to constitute a working group to re-conceptualise the structure of title insurance products.[28]

India's rank in the parameter of "Enforcing Contracts" stands at a low of 163, which can partly be attributed to a very high associated cost of 31 per cent of the claim value as against the lowest cost, 9 per cent, in Iceland. Liability insurance can help mitigate this high cost to some extent.[29] Some private general insurers offer certain types of liability insurance in India, but there is scope for better penetration and adoption of liability insurance. Greater uptake of liability insurance will help in containing high legal costs and will improve India's rank under this indicator.

Recovery times and recovery rates of creditors in terms of resolving insolvency are poor. It takes over 4 years in India to resolve insolvency proceedings and make recoveries, compared to under 2 years in the countries of Organization for Economic Co-operation and Development

27 This reform pertains to the two cities, Delhi and Mumbai, which are considered in the Doing Business report of the World Bank.

28 https://www.irdai.gov.in/ADMINCMS/cms/frmOrders_Layout.aspx?page=PageNo3918

29 https://www.indiainfoline.com/article/news-personal-finance/how-insurance-can-improve-the-ease-of-doing-business-insurance-for-business-117112400431_1.html

(OECD). Also, in India typically, recovery rates for credit in cases of insolvency are less than 27 per cent, compared to over 70 per cent in OECD countries.

Also, there is no unemployment insurance system in India, which points towards an area where improvement can be achieved by introducing such a scheme.

China: China has implemented a plethora of reforms to establish a friendlier business climate. Registering employees with the Social Welfare Insurance Center takes only one day and no cost, which considerably simplifies this mandatory procedure for starting business owners. China scores the highest possible score (2) in the liability and insurance regimes index which is a component of the dealing with construction permits indicator as per China's economy profile, World Bank Doing Business 2020. According to the National Development and Reform Commission's Report on the implementation of the 2018 plan for national economic and social development and on the 2019 draft plan for national economic and social development[30], the central regulation system for enterprise employees' basic old-age insurance funds formally came into operation in China and it also brought the collection and management of social insurance premiums under the roof of a single agency. As per the report, national platform for trans-provincial settlement of medical bills through basic medical insurance accounts was enhanced. Moreover, the report further highlighted that the unemployment insurance functioned more effectively in terms of ensuring basic living standards, preventing job losses, and promoting employment and improvements were made to the policies concerning rural migrant workers' participation in workers' compensation schemes. The report also stated that "we will continue implementing the time-limited policy of reducing unemployment insurance premiums, substantially expand the scope of expenditures from unemployment insurance funds to ensure employment, and fully enforce the policy of refunding unemployment insurance premiums to help enterprises maintain stable employment."

South Africa: South Africa needs to improve its insurance game. According to the Doing Business 2020 Report, South Africa does not have a liability and insurance regime required for building permits**.** InvestSA is working with the Unemployment Insurance Fund and the Compensation Fund to integrate these processes into a single online platform, which will be a first for South Africa.[31]

6. Impact of COVID-19 on the insurance sector in BRICS

The COVID-19 pandemic has impacted the BRICS' insurance sectors. Kirti and Shin (2020) indicate that COVID-19 will impact insurers directly through health shocks[32] and indirectly through financial shocks.[33] In India and China, the pandemic dealt a blow to the life insurance industry during their most lucrative time (Peters, 2020; PwC, 2020). It also affected aviation

30 http://www.xinhuanet.com/english/special/2019lh/download/Full%20text%20Report%20on%20China's%20national%20economic,%20social%20development%20plan.doc

31 http://www.engineeringnews.co.za/article/efforts-under-way-to-improve-south-africas-business-ranking-2019-08-19/rep_id:4136

32 Health shocks in the form of rise in mortality and morbidity (Kirti and Shin, 2020).

33 Financial shocks, in the form of lower equity prices, higher credit spreads, possible extensive downgrades, and lower interest rates (Kirti and Shin, 2020).

and travel accident insurance sales in China, as the Chinese New Year was the prime time for travel and tourism and the outbreak led to decline in travel (Peters, 2020). However, after the worst phase of the COVID-19 outbreak in February, measures for providing online services benefitted some insurers in the Chinese economy. [34] (Copper-Ind, 2020).

Indian life insurers' new business premiums, on the other hand, plunged 25.6 per cent, 32.6 per cent, and 32.17 per cent in May 2020, April 2020, and March 2020, respectively, vis-á-vis the corresponding period last year, as per IRDAI data.[35] Analysts state that the pandemic has thwarted distribution channels of bancassurance and agents, which account for a major share of new business premiums in India (Laskar, 2020).

In Russia, the All-Russian Union of Insurers has approached the Bank of Russia requesting temporary easing of the requirements for players in the insurance sector (Russia Business Today, 2020).

Additional challenges are also surfacing for insurance sectors in the BRICS countries. The Indian regulator, IRDAI, has directed insurers to receive COVID-19 claims under active health insurance policies, which is likely to be onerous for them (in case attended to outside government hospitals) as the COVID-19 risk has not been priced under active products (PwC, 2020). Similarly, Brazil's life insurance products generally exclude pandemic- or epidemic-related coverage; however, the current crisis has led many Brazilian insurers to announce that claims pertaining to the current pandemic will be provided coverage under life insurance products (Hill and Suryan, 2020). Furthermore, Indian insurers can also face some immediate liquidity issues owing to the IRDAI's guidance to extend the grace or delay period by 30 days under the circumstance of policy lapse or renewal, factoring in the pandemic-induced disruption of business across the country (PwC, 2020). In the case of South Africa as well, the inability of policyholders to pay premiums is likely to create further challenges for insurers (Whitehouse, 2020). Over the longer horizon, it is expected that awareness pertaining to insurance will increase, which will bode well for the sector (PwC, 2020; Peters, 2020).

7. Conclusion

The paper has attempted to examine the effect that opening up the insurance sector has on the sector. Although not as much explored as the interconnection between insurance sector performance and economic growth, the relationship between the liberalisation of the insurance sector and its performance is a crucial one. Financial liberalisation affects the insurance sector via various channels. These include the risk-taking behaviour of the insurance firm, cost channels, competitiveness, technology and skills, and regulation and supervision.

[34] Five registered insurers gained, including China Life Insurance and the People's Insurance Company Group of China (PICC) (Copper-Ind, 2020). China Life Insurance's premium income soared 131.3 per cent from February to March and the PICC announced a surge of 115.48 per cent in its premium income of March (Copper-Ind, 2020)

[35] IRDAI data: New Business Statement of Life Insurers for the Period ended 31st, May 2020; New Business Statement of Life Insurers for the Period ended 30th April, 2020; and New Business Statement of Life Insurers for the Period ended 31st March, 2020.

In this paper, we have critically examined India’s insurance sector liberalisation journey. Besides the Indian experience, the paper has also described the insurance sector liberalisation in the BRICS. There is evidence that increasing foreign participation can benefit India’s insurance sector by increasing capital inflow, higher competition, and introduction of newer technologies and distribution channels. Despite considerable reforms and a movement towards a more open and globally integrated insurance sector, hindrances to foreign investment prevail in the sector, with barriers taking the form of ownership restrictions, price restrictions, and limits on diversification. The liberalisation experiences of BRICS countries, reveals positive linkages between higher foreign participation and insurance sector performance. Moreover, the impact of liberalisation on each country’s insurance sector as documented in the paper is different, ranging from enhanced firm efficiency to increased premium growth, depending on the idiosyncrasies of the underlying insurance sector.

Lastly, the paper has opened a preliminary enquiry into the possible influence that insurance exercises on the ease of doing business ranking, which reveals that the insurance sector features significantly in the improvement of an economy’s business environment, which is reflected in the Ease of Doing Business rankings of the World Bank.

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Annexures

Annexure 1: Summary of Papers

Title/author	Objective	Data	Methodology	Findings
Theoretical papers				
Dickinson (1998)	Discusses the intermediary role of the private insurance sector as a mechanism for risk transfer and as a means of mobilising saving and developing the capital market			Insurance sector plays a key economic role within the risk transfer-capital market nexus.
Liedtke (2007)	Contributions that insurance makes to the development of a modern economy.			
Skipper (1997)	Examined the means by which foreign insurers might actualise their contributions to economic development. Analysed the arguments as to why countries might be wise either to go slow in market liberalisation or to limit foreign involvement in their insurance markets.			
Empirical papers				
Adams, et al. (2009)	Examine dynamic historical relation between commercial bank lending, insurance, and economic (income) growth in Sweden	Time series	Dynamic panel data analysis.	Insurance has Granger-caused economic growth and bank lending. Insurance is an important prerequisite for stimulating economic growth
Alhassan and Fiador (2014)	Long-run causal relationship between insurance penetration and economic growth in Ghana	Annual time-series data on aggregate, life, and non-life insurance penetration, GDP growth, trade volume, gross	Autoregressive distributed lag (ARDL) bounds approach to cointegration	Long-run positive relationship between insurance penetration and economic growth which implies that funds

Title/author	Objective	Data	Methodology	Findings
		fixed capital formation and consumer price index as a proxy for inflation from 1990 to 2010		mobilised from insurance business have a long-run impact on economic growth.
Arena (2008)	A systematic assessment of the causal effect of insurance market activity on economic growth	Pooled (cross-country, time-series) data set consisting of 56 countries and, for each of them, at most 6 non-overlapping five-year periods over 1976-2004.	Generalised method of moments for dynamic models of panel data	
Ching, et al. (2010)	Examine the existence of a causal relation between the life insurance sector and the growth of the Malaysian economy	Series of quarterly data obtained from the Monthly Statistical Bulletin, published by the Central Bank of Malaysia. The data ranges from the first quarter of 1997 to the second quarter of 2008	Johansen cointegration test, and the Granger causality test based on the Vector Error Correction Model (VECM)	
Dash, et al. (2018)	Examine causal relationship between insurance market penetration and per capita economic growth	Insurance market penetration and per capita economic growth in 19 Eurozone countries for the period 1980-2014	Granger causality regression model	
Ghosh (2013)	Find the relationship between the life insurance industry and economic development in India		VAR- VECM model to find out the long-run and short-run relationship (if any) between life insurance growth and economic growth along with Granger causality test to suggest any causal relationship	Long-term relationship between life insurance industry and economic development in India. And the Granger causality test suggests that the life insurance sector improves the overall economic development in India and the reverse is not significant.
Haiss and Sümegi (2008)	Investigate the impact of both insurance investment and	Cross-country panel data analysis from 1992 to 2005 for 29 European countries.	Endogenous growth model with a modified Cobb-Douglas production	A positive impact of life insurance on GDP growth in the EU-15 countries, Switzerland, Norway, and Iceland. For

Title/author	Objective	Data	Methodology	Findings
	premiums on GDP growth in Europe		function assuming constant returns to scale and perfect competition	the New EU Member States from Central and Eastern Europe, they find a larger impact for liability insurance. Furthermore, the findings emphasise the impact of the real interest rate and the level of economic development on the insurance-growth nexus.
Han, et al. (2010)	Investigate the relationship between insurance development and economic growth	Dynamic panel data set of 77 economies for the period 1994-2005.	GMM models	Insurance development is positively correlated with economic growth. For the developing economies, the overall insurance development, life insurance, and non-life insurance development play a much more important role than they do for the developed economies.
Kaushal and Ghosh (2016)	Find the empirical relationship between financial institutions (such as banking and insurance institutions) and economic growth in the Indian economy during the post liberalised period when the reforms were initiated in the financial sector.	Monthly statistics from July 2004 to June 2013.	Vector Error Correction Model (VECM)	A long-run relationship and insurance institutions do promote the economic growth and vice-versa. A bi-directional causal relationship between development of insurance institutions and economic growth in the short run.
Kugler and Ofoghi (2005)	Components of insurance premia to find a long-run relationship between development in insurance market size and economic growth	Annual basis and cover period 1971 to 2003 for general insurance (for reinsurance and MAT it covers 1971 to 1997). For long-term insurance premiums, they extend to 2003 and start back in 1966. Data for GDP comes from Economic and Social Data Service (ESDS) and World Bank data set.	Johansen's λ Trace and λ max cointegration tests.	For most cases, a long-run relationship between insurance market size and economic growth rather than a cyclical effect.

Title/author	Objective	Data	Methodology	Findings
Lee, et al. (2013)	Reinvestigate stationarity properties of real-life insurance premiums per capita and real gross domestic product (GDP) per capita	Real life insurance premiums per capita and real gross domestic product (GDP) per capita for 41 countries within three levels of income covering 1979-2007.	Panel seemingly unrelated regressions augmented Dickey-Fuller (SURADF) test	Per capita real insurance premiums and real GDP per capita in the sample countries are a mixture of I(0) and I(1) processes, and the generally used panel root tests could lead to misleading inferences. The long-run estimated panel regression parameter results indicate that a 1% increase in real life premium raises real GDP by 0.06%. a positive bi-causal relationship between the level of economic activity and life insurance markets in the long-run.
Njegomir and Stojić (2010)	Examine the impact of insurance on economic growth and interaction of insurance and banking in promoting economic growth in ex-Yugoslavia region.	Panel data for 5 countries, which formerly were constituent republics of Socialist Federal Republic of Yugoslavia, over the time period 2004-2008	Country-specific fixed effects models	Insurers provide positive effect on economic growth both as providers of insurance risk management and indemnification and as institutional investors.
Oke (2012)	Examined the short- and long-run relationships between economic growth and insurance sector development in the Nigerian economy.	Relevant data within the period from 1985 to 2009	Fixed-effect model: co-integration estimation technique of error correction models (ECM)	Insurance sector growth and development positively and significantly affects economic growth.
Pradhan, et al. (2016)	Investigates whether there are Granger causal relationships between insurance market penetration, broad money, stock-market capitalisation, and economic growth	Panel data for the Association of South East Asian Nations (ASEAN) Regional Forum (ARF) countries for the 1988-2012 period.	Multivariate framework: log-linear model: panel cointegration test and a panel Granger causality test.	A network of causal connections, including short-run bidirectional causality between insurance market penetration and economic growth.
Sawadogo, et al. (2018)	Examines the relationship between the development of the life insurance sector and economic growth	Panel data of 86 developing countries over the period 1996-2011	Generalised-method-of moments techniques developed for dynamic panels	The marginal positive impact of the development of life insurance decreases with the levels of deposit interest rate, bank credit, and stock market value traded, while the effect is greater in low

Title/author	Objective	Data	Methodology	Findings
				and middle-income countries and in countries with high-quality institutions.
Ward and Zurbruegg (2000)	Short- and long-run dynamic relationships exhibited between economic growth and growth in the insurance industry for nine OECD countries.	Annual data for real GDP and total real premiums issued in each country from 1961 to 1996	Cointegration analysis by constructing a reduced-form bivariate vector autoregression (VAR) to test for Granger causality	In some countries, the insurance industry Granger causes economic growth, and in other countries, the reverse is true. These relationships are country specific and any discussion of whether the insurance industry does promote economic growth will be dependent on national circumstances.
Webb, et al. (2002)	Explore the effects that banks and insurers separately and jointly have on economic growth.	Economic and financial variables for 55 countries over the period 1980 through 1996.	Classical linear models and simultaneous systems of equations	Banking and life insurance penetration are robustly predictive of increased productivity across the 55 countries. The results also suggest that higher levels of banking and insurance penetration produce greater benefits together than would be indicated by the sum of their individual contributions.
Verma and Bala (2013)	Examines the relationship between life insurance and economic growth in India.	Compiled from the Handbook on Indian Insurance Statistics, IRDA annual reports, and the Economic Survey for the time period 1990-91 to 2010-11.	Ordinary Least Squares regression model	Life insurance significantly influences economic growth in India.
Zhou, et al. (2012)	Examine the link between the role of insurance and economic growth	Dynamic panel data for 8 countries, including 23 developed countries and 15 emerging countries, covering a period between 1982 and 2008.	Fixed-effect dynamic panel data model	Significantly positive relationship between insurance stock returns and future economic growth. The effect of law and governance on the link between the role of insurance and economic growth is more significant in developed markets than in emerging markets.

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