Insurance Sector in India: Towards the 2020 Vision

by
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Abstract
We examine the critical underpinnings of the recent 2020 Vision mooted by the Planning Commission. We show how the insurance sector will play an important role in the implementation of this Vision Statement. We show that by 2020, premium volume in the Indian market could easily exceed USD 120 billion in today's money.

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Introduction

Government of India has set out a goal where it would be in 2020 in different dimensions. In this paper, we posit the role insurance will play in this scenario.

First, we assess the general macroeconomic trends in India. In doing so, we discuss policy goals, economic realities to achieve those policy goals and political realities to implement them.

India has professed to commit itself to a long term goal: a quadrupling the real Gross Domestic Product by the year 2020 (Planning Commission, 2003). To make this vision a reality, simple arithmetic shows that it requires a 7%-8% growth in real GDP over a period of 17 years (2004-2020).

The proponents of this vision are quite positive about this vision. They write, "The compounded effect of achieving the targeted annual GDP growth rate of 8.5 to 9 per cent over the next 20 years would result in a quadrupling of the real per capita income and almost eliminating the percentage of Indians living below the poverty line. This will raise India's rank from around 11th today to 4th from the top in 2020 among 207 countries given in the World Development Report in terms of GDP. Further, in terms of per capita GDP measured in ppp India's rank will rise by a minimum of 53 ranks from the present 153 to 100. This will mean, India will move from a low income country to an upper middle income country. This is a very real possibility for us to seize upon and realise."

How realistic is this vision? We examine that question first.

Goldman Sachs Model Projection

In 2003, economists at Goldman and Sachs used a routine model of economic growth[1] to project the total GDP for a number of countries up to 2050. In the following table, we have reproduced a selection of those up to 2020. The simple conclusion is that total real GDP in India will be on par with France and the UK by 2020 and somewhat smaller than Germany.

The authors of the paper do not use optimistic assumptions to come up with these figures. They also point out that if the same model were applied to Japan/Korea in 1960, they would underestimate the current actual GDP of Japan/Korea.

Table 1: Projected GDP in 2000 US dollars

Year	India	France	Germany	UK
2000	469	1,311	1,875	1,437
2005	604	1,489	2,011	1,688
2015	1,411	1,767	2,386	2,089
2020	2,104	1,930	2,524	2,285

Source: Goldman Sachs, 2003.

Saving, Investment and Economic Growth

The ask rate is critically dependent on how the economy is able to absorb macroeconomic shocks. Specifically, it depends how well the economy can cope with risks of bad monsoons. Let us examine the positives and the negatives of this equation.

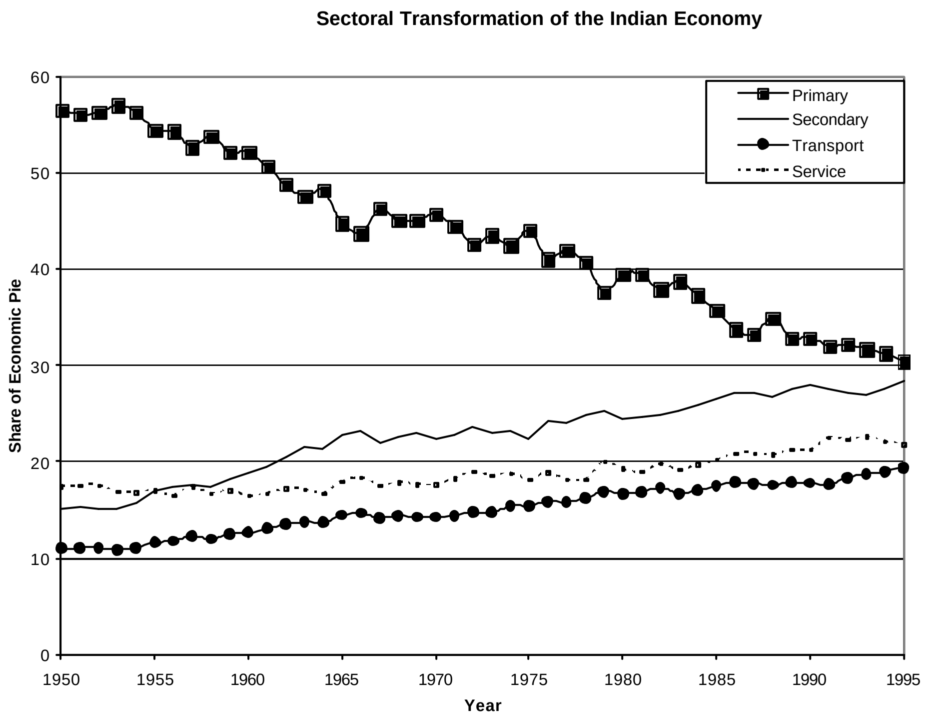
The Positives

When India became independent in 1947, it was a vastly rural economy where traditional agriculture dominated the economic landscape. This situation has been changing steadily over the past five decades. The changing landscape can be seen vividly in the following (see Figure 1).

[1] They use a simple Cobb-Douglas production function, with a saving rate in India of 22%. This assumption is conservative (see below).

It shows that the share of the primary sector in the economy has gone from 58% of total GDP in 1950 to under 30% by 1995. On the other hand, the contribution of the secondary sector (where the largest segment is manufacturing) to the GDP has grown steadily to occupy the same importance in the economy as the primary sector. The share of transport sector in the GDP has also increased steadily. Although the share of services in the GDP has not grown as much, the composition of it has also changed behind the scenes. Traditional services have been replaced by more modern types of services.

Figure 1: Sectoral Contribution to GDP, 1950-1995



The second positive element for India is the direction of saving and investment. Economic growth comes from higher saving rate leading to higher investment (capital formation) leading to economic growth. The *causality* of higher saving leading to higher

GDP cannot be theoretically settled. It is taken as an article of faith. In some cases, such a faith is misplaced. For example, Sinha and Sinha (1998) have shown that in the case of Mexico, higher saving *precedes* higher economic growth and *never* the other way around. In the case of India, however, preliminary analysis shows that indeed higher saving leads to higher economic growth (Sinha, 2004a).

Where is all the saving concentrated in India? Document from the Reserve Bank of India (RBI) (http://www.rbi.org.in/sec3/31188.pdf, Table 2.1) drawing on the data from the Central Statistical Organization (CSO) shows that in 2001, around 11% of saving are in financial assets with additional 10% in the physical assets. Corporate saving account for 4% of the GDP. In addition, there is a small dissaving by the Government sector.

How does India measure with respect to growing saving and investment? The following figure (Figure 2) answers that question. It shows a very clear trend: over a period of fifty years, both saving and investment are rising. Coupled with the observation that economic growth in India follows higher saving, we conclude that this trend can be considered a "good thing" for India.

Figure 2: Saving and investment rates, 1951-1999

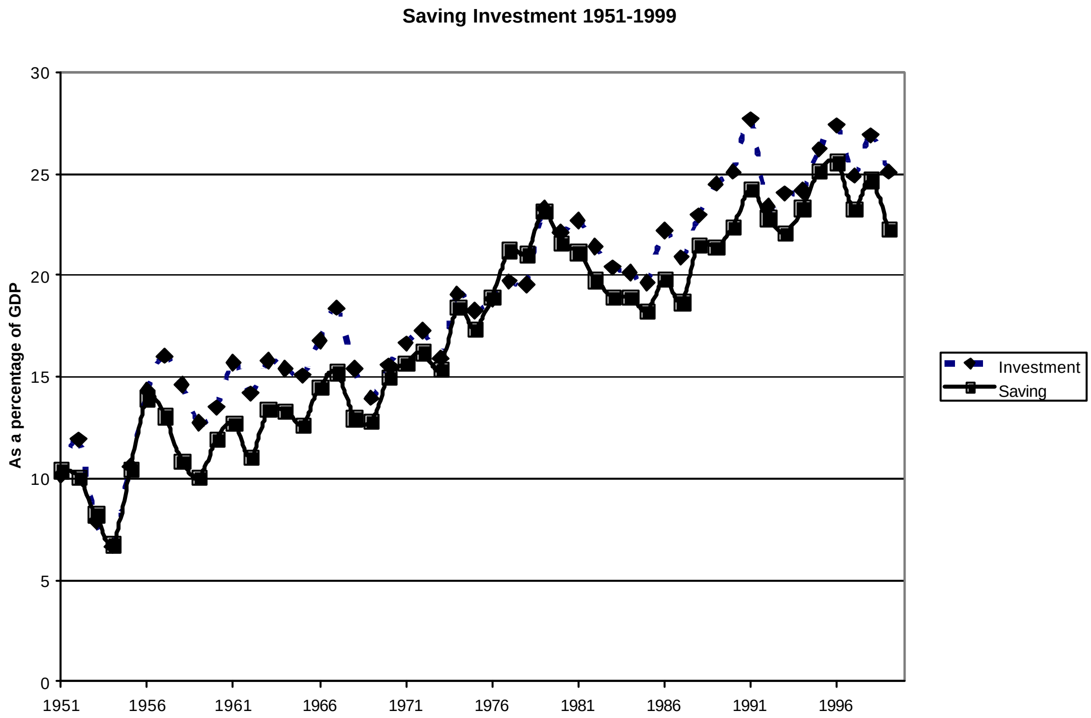


Figure 2 shows in 1950, the saving and investment rates in India hovered around 10% of GDP. They have risen to around 25% of GDP by 1999. Note that investment rate does not necessarily track saving rate exactly. The difference is usually financed either through domestic or foreign borrowing. For developing countries with largely closed economies, with restrictive access to both domestic and international capital markets, the gap between saving and investment rates can be worrisome. In 1956-7, 1966-7 and again in 1990-1, the difference reached 3% or more of the GDP. The most traumatic was the 1990-1 event. International lenders began to doubt the capacity of the Indian Government to finance such a debt given the dwindling foreign exchange reserves precipitating in a crisis for the Indian economy.

In the spirit of "Look East" policy initiatives, it is instructive to compare the saving rate of India with that of the other rapidly growing countries in the region. The first striking feature of Table 2 is that with the exception of Indonesia and the Philippines, all other countries in the reference set have higher saving rate (than India) over the past seven years.

Table 2: Gross domestic saving as a percent of GDP

	1997	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*
China	41.5%	39.8%	39.4%	38.0%	38.6%	38.7%	38.2%
Hong Kong	31.6%	30.5%	30.9%	32.9%	31.6%	33.9%	34.0%
South Korea	33.7%	34.4%	32.9%	32.4%	30.2%	29.2%	28.0%
Indonesia	31.5%	26.5%	19.5%	25.1%	24.9%	21.1%	20.1%
Malaysia	43.9%	48.7%	47.4%	47.1%	42.2%	41.8%	42.1%
Philippines	18.7%	21.6%	26.5%	24.8%	17.0%	17.3%	19.5%
Singapore	50.5%	51.7%	48.8%	47.9%	43.6%	44.2%	47.1%
Thailand	33.6%	36.1%	32.8%	31.0%	30.0%	30.5%	28.7%

Source: ADB. 2003. *Asian Development Outlook* .

The Negatives

One important element of the Indian economy is agriculture. In the past, India had tremendous dependence on agriculture. It has fallen steadily over the past two decades (see Table 3). Nevertheless, some 25% of GDP in India comes directly from agriculture.

Table 3: Sectoral share of GDP at factor cost

Sector	1980/81	2001/02
Agriculture, forestry, and fishing	38	25
Industry	26	26
Services	36	49
Total	100	100

Source: Central Statistical Organization.

In terms of employment, this dependence is even stronger. Some 55% to 60% of working population depends either directly or indirectly on agriculture. Dependence of agriculture is problematic. The amount of land under irrigation (even with generous definition) is less than 40% (http://planningcommission.nic.in/plans/planrel/plsec3.pdf, page 44). This leaves a huge gap between what is irrigated and what is not. To put it differently, more than half of the land under cultivation is at the mercy of Mother Nature. Thus, a large chunk of the economic output depends on the generosity of monsoons. In addition, micro-climatic conditions do not allow uniform outcome in every part of the country. Therefore, there will always be variation across the country even at a given point in time.

Moreover, the natural phenomena such as floods and cyclones also affect India at an elevated rate. Some 2.25% of Indian GDP and 12.15% of Central Government outlay has been eaten up by the vagaries of weather. The following table (Table 4) shows how high India's vulnerability is. Along with Bangladesh, India ranks among the top five spots on vulnerability index (constructed using the frequency and severity of weather related phenomena). The other countries in top five are island nations (with the exception of Bangladesh).

For the insurance industry, high vulnerability can be an opportunity. If, for example, weather related insurance products take off, India can become a big market. There are already some small beginnings. For example, instead of traditional crop insurance (which always loses money) rainfall index related policies are being sold to small farmers in Andhra Pradesh.

Table 4: Vulnerability index of the Indian economy

Country	Index Value
Vanuatu	727.17
Bangladesh	539.16
Trinidad & Tobago	523.13
India	510.67
The Bahamas	491.28
Mauritania	487.55
Antigua & Barbuda	430.77
Botswana	418.03
Mozambique	361.13
The Gambia	339.16

Swaziland	304.31
Fiji	296.28
Dominica	261.97
Sao Tome & Principe	245.49
Chad	241.60

Source: Commonwealth Secretariat

The second negative element of the present Indian economy is the consistent budget deficit that is leading to rising government debt. What effects do deficits and debts have on the economic growth? A recent speech given by Martin Feldstein at the Reserve Bank of India highlights this effect: "To get a sense of the magnitude of these effects, consider just the impact of India's recent deficits on capital formation and growth. If India did not have its current central government deficit of some 6 percent of GDP, the gross rate of capital formation could rise from 24 % of GDP to 30%. The net rate of investment would rise relatively more. Over the next decade, this greater rate of net capital accumulation would be enough to add nearly a full percentage point to the annual growth rate, raising India's level of GDP a decade from now by about 10 percent." (http://www.rbi.org.in/sec5/50482.pdf)

The source of worry that Feldstein alluded to, can be seen in the following figure (Figure 3)

Figure 3: Debt as a percentage of GDP: 1974-2001

There are two clear trends in Figure 3. First, the value of *domestic* debt as a percent of GDP is growing steadily. *Foreign* debt, however, is falling over time. Thus, we have a "bad news/good news" situation. The dependence of the government on foreign debt has gone down over the past three decades but at the same time there has been a marked growth in domestic debt, especially in the past five years. This is a definite source of weakness for putting brakes on economic growth. This reduction in foreign debt (and rising foreign exchange reserves) has prompted Fitch and Moody's to raise the foreign currency rating for India.

The Role of Insurance and Risk Management

What is the fundamental role of insurance? Insurance has the fundamental role of smoothing out fluctuation of cash flows. For households, life insurance can reduce the drastic fall in income of the family if the insured person dies. Through pension plans, a fall in retirement income can also be mitigated. Similarly, companies may be able to avoid bankruptcy through the use of risk management in general and insurance in particular.

What role does the insurance sector play in this story of saving and investment in India? In general, saving is channeled into several specific financial institutions. For most countries, a substantial proportion is invested in banks. Some of it is invested in longer term markets for capital such as stocks and bonds. In many cases, a significant portion goes to the insurance sector. It could take the form of life insurance, pension plans, health insurance and others. In Table 5, we show what role insurance plays in different countries. In general, high per capita income is associated with high proportion of GDS (and also with high proportion of GDP) coming from the insurance sector. Thus, higher level of development seems to come with high level of activities in the insurance sector.

Table 5: Life Insurance Premium as Percentages of the Gross Domestic Saving (GDS) and that of the Gross Domestic Product (GDP)

Rank	*Country*	*% of GDS*	*% of GDP*
1.	United Kingdom	52.50	7.31
2.	South Africa	51.55	10.32
3.	Japan	32.46	10.10
4.	France	26.20	4.91
5.	USA	25.20	3.63
6.	South Korea	23.66	9.10
7.	Finland	23.10	4.98
8.	Switzerland	21.92	5.99
9.	Netherlands	19.04	4.51
10.	Israel	18.84	4.41
11.	Sweden	17.88	3.51
12.	Australia	17.78	3.48
13.	Canada	17.05	3.04
14.	Zimbabwe	15.88	6.27
15.	Ireland	14.96	4.59
16.	Greece	13.87	1.12
17.	New Zealand	12.75	3.04

18.	Taiwan	12.29	3.64
19.	Denmark	12.00	2.71
20.	Spain	11.68	2.23
21.	Germany	11.40	2.80
22.	Norway	9.57	2.33
23.	Belgium	9.13	2.38
24.	Portugal	8.76	1.65
25.	Austria	6.96	2.10
26.	Chile	6.96	1.95
27.	India	5.95	1.29
28.	Italy	5.60	1.13
29.	Malaysia	5.35	2.30
30.	Singapore	4.72	2.73

Source: Roy (1999). Note: Figures for 1994.

In general, when various components of the insurance market develop, insurance sector takes on a bigger share of the GDS and of the GDP. Sinha (2004b) has examined the relation between insurance and GDP in India. A tentative conclusion is that a rise of one percent of real GDP leads to a rise of two percent of rise insurance demand in the context of India. Thus, rough estimates would suggest that quadrupling of GDP in India by 2020 will lead to an eight-fold rise in insurance demand. Of course, this rise in demand will not be spread equally across different segments of the market. For example, there will be bigger impact on the life and pension markets. This effect will be tempered by a smaller rise in fire, auto, marine and fire insurance sub-sectors.

Comparing Banking and Insurance in Economic Crises

Banking always leads the financial sector – especially in developing countries. The reason is clear. For businesses to grow, for commercial activities to flourish, loans from banks pave the way. Stock market usually plays the second fiddle. In most cases, insurance pays the third fiddle! For the countries with developed markets, this is not necessarily the case.

It is important to keep in mind how hard economic crises hit banking and how costly it is to rescue the banks (which, even in the absence of formal deposit insurance, most countries end up undertaking). Table 6 vividly illustrates this issue. Rescuing banks can drain huge resources. In contrast, insurance companies do not require similar rescue missions as they have a much bigger cushion in the form of reserves.

Table 6: The Cost of Rescuing Banks

Date	Country	Cost % of GDP
1980–1982	Argentina	55
1997–ongoing	Indonesia	50
1981–1983	Chile	41
1997–ongoing	Thailand	33
1997–ongoing	South Korea	27
1997–ongoing	Malaysia	16
1994–1997	Venezuela	22
1995	Mexico	19
1990–ongoing	Japan	20
1989–1991	Czech Republic	12
1991–1994	Finland	11
1991–1995	Hungary	10
1994–1996	Brazil	13
1987–1993 1998	Norway Russia	8 5–7
1991–1994	Sweden	4
1984–1991	United States	3

Source: Daniela Klingebiel and Luc Laewen, eds., Managing the Real and Fiscal Effects of Banking Crises, World Bank Discussion Paper No. 428 (Washington: World Bank, 2002).

In India, the crisis of 1991-92 left a number of banks very undercapitalized. The government started the long and slow process of infusing more money to these public sector banks (see Table 7). The total amount of money exceeded eight percent of the GDP.[2] But, since, they were undertaken over a long time, the problems of banks in India

[2] No recapitalization support was provided to banks for the years 1999-2000 and 2000-01. Subsequently, the Union Budget 2000-01 announced that the Government would consider recapitalization of the weak banks to achieve the prescribed capital adequacy norms, provided a viable restructuring program acceptable

never came under the "crisis" category. Recent economic boom has also helped India to bring the proportion of nonperforming assets down. Since the definition of nonperforming assets vary across countries, it is difficult to compare India with other countries.

Table 7: Cost of re-capitalization of banks in India

	1993	1994	1995	1996	1997	*1998*
Capital cost as a percent of GDP	*0.73*	*1.31*	*1.32*	*1.38*	*1.58*	*1.52*

Source: Raje (2000).

Are Foreign Participants a Threat?

In most developing countries, it is common to hear that foreign insurance companies can be a threat to the domestic industry. This is the so-called infant industry argument: if we allow foreign companies to come in, they will wipe out the domestic industry. In this regard, it is instructive to examine the experience from other countries in the region where foreign companies have been allowed to operate. Table 8 presents these results. In most countries, foreign presence has not eliminated domestic players. In India, the story remains the same for banks. Even though there are many foreign banks operating in India, their combined market share is barely in the double digits. By most accounts, the effects of the presence of the foreign banks have been positive. They have forced local banks to improve their services.

Table 8: Foreign market share of premium

Country	Life	Non-life
China	1.7%	0.7%
Malaysia	62.6%	23%
Taiwan	29.9%	11%

to the Government as the owner and the Reserve Bank as the regulator is made available by the concerned banks. Accordingly, during the year 2001-02, a sum of Rs.1,300 crore (or 0.31% of the GDP) was disbursed.

Korea	6.7%	0.6%
Indonesia	46.0%	27%
Japan	8.9%	6%

Source: For life markets, Sigma 4/2001, all figures for 1999. For non-life markets, Sigma 6/2003, all figures for 2001.

Where will the Indian market be in 2020?

Vision 2020 identified the following factors as the engines of economic growth in India: Rising education level, rates of technological innovation, cheaper and faster communication, availability of information, and globalization. It makes no mention of the financial sector. Economic growth does not take place in vacuum. There are two critical ingredients needed. First, there has to be a well-defined legal environment. Legal framework has big impact on the development of the financial sector. As a result, it also has a huge impact on economic growth (see La Porta et al., 1998). Second, there has to be a well functioning financial market (see Sinha, 2001).

Vision 2020 document mentions "insurance" eight times in the 108 pages. On the other hand, it mentions banking only once! Given that services sector will become the largest in India, both insurance and banking will play a critical role along with the stock market. This document does, however, contain a paragraph about a particular area of insurance: health insurance. "Health insurance can play an invaluable role in improving the overall health care system. The insurable population in India has been assessed at 250 million and this number will increase rapidly in the coming two decades. This should be supplemented by innovative insurance products and programmes by panchayats with reinsurance backup by companies and government to extend coverage to much larger sections of the population." (Planning Commission, 2003, page 55). At present, health insurance is not being discussed much. But, Indians spend close to 5% of their income out of pocket for health related issues. Thus, it is easy to see why this is an easy pick. So is the pension market. At present, private pension is its infancy in India. It will not remain so in the coming decades.

Let us conduct the following thought experiment using Table 1 for getting an idea of where the Indian market might be in 2020. First, let us follow an *extremely* conservative projection: insurance demand goes exactly in line with income. In this case, we are assuming that in 2020, even in the face of rising income, the penetration of insurance (premium/GDP) stays exactly the same as in 2002. In that case, we will simply multiply the current premium volume figure four-fold. In Sigma 8/2003, such figures are available for 2002 for India. In such a case, the premium volume will be USD 67 billion. Of course, evidence from other countries show that rising income below certain threshold has a nonlinear impact on insurance demand (the so-called S curve of insurance demand). So, insurance penetration *is not likely* to stay at 3.2% for India (the figure for 2002) in 2020. If the penetration rises to 5% (more plausible if we believe in the S curve), then the premium volume will rise to USD 105 billion. If it rises to 6%, then the premium volume would rise to USD 121 billion. This thought experiment above does not even address the two future potential growth drivers: private pensions and health insurance. Given that Indians are already spending 5% of their income out of pocket for health care, this could easily add another USD 30 to 40 billion by 2020. This will raise the premium volume to USD 135 to USD 160 region by 2020.

Conclusions

The insurance business is at a critical stage in India. Over the next two decades we are likely to witness high growth in the insurance sector for three reasons. Financial deregulation always speeds up the development of the insurance sector. Growth in income also helps the insurance business to grow. In addition, increased longevity and aging population will also spur growth in health and pension segments.

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