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## **Impact of Economic Growth on the Health Sectors of India and China: A Comparison**

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**Abstract:** The growth stories of India and China fascinate the world Economists. The Asian neighbors with similar landscape, huge population and similar living standards with millions of people under poverty until the 1950s, have seen a turnaround in their nations after the implementation of Economic reforms. India initiated Economic Reforms in 1991, while China did 13 years earlier in 1978. India started growing at a rate of 6.5% per annum for three decades, while China started growing at a rate of 9.5% p.a. for 3 decades. India and China are now home to a burgeoning middle class. India has 22 cars per 1000 people, while China has 164 cars per 1000(2018). How has the Economic growth impacted the Health sector of the nations, is what the researcher intends to find in this research article. Healthy citizens mean more productivity leading to further Economic growth and more incomes and improved standards of living. How do India and China

fare against each other? Are there lessons to learn?

### **Introduction:**

The growth stories of India and China are worth studying. The Asian neighbors with similar landscape, huge population, huge uneducated mass which pursued agriculture for a living and the two countries which had millions of people living under poverty until the 1950s have transformed their economies with the initiation of Economic reforms. China initiated reforms in 1978, while India initiated Economic reforms in 1991. China started growing at 10% per annum for 3 decades while India started growing at 6% per annum for 3 decades. China has transformed itself into a manufacturing hub, while India has transformed itself into an IT hub. The economic growth in the nations has led to an increase in the standards of living of the people in both the countries. The erstwhile

people living under poverty have been pulled out of poverty. India and China are now land of a rising middle income class. India has 22 cars per 1000, while China has 164 cars per 1000 population (2018), which is an indication of the rising middle class.

Has economic growth impacted the health sector? How have the governments invested their growth revenues into the welfare of the citizens? Healthy citizens contribute to productivity, productivity yields income, incomes lead to economic growth. Has the life expectancy at birth improved after economic growth? Israel boasts of a life expectancy of 82.5 years to its citizens. How affordable is health to the average Indian/Chinese? Do they have access to primary health care? While the high income nations like USA and Canada provide universal health coverage to their citizens, what percentage of the middle income nations of India and China are actually covered under a health insurance scheme? India's efforts to Universal Health coverage began immediately after its independence, but much progress has not been witnessed. (Gita Sen 2012). Switzerland and Singapore are the world's leaders in health care systems. Where does India and China stand in the world health care ranking?

Health expenses are driving people back to poverty says WHO reports. In 2010-11, the world witnessed 55 million people go into poverty due to high out of pocket health expenses. When 10% - 25% of a household income is spent on health expenditure, the households will not be able to meet their other basic needs. When the situation persists, this becomes catastrophic, pushing them to poverty. Government reforms are therefore needed to provide their citizens with financial protection to off-set their out of pocket health expenses. Countries like Germany, Netherlands provide their citizens with financial protection to off-set their out of pocket health expenses? What are the level of

out of pocket health expenses in India and China? Do they have a financial protection scheme in place? This paper tries to unravel these questions in this article.

**1. Impact on the Health Care Sectors: (Has Economic Growth impacted the health sectors of India and China? How have the Governments invested into their health sectors?)**

**INDIA**

Indian health care sector has shown significant progress from the year 1991 onwards. Private hospital chains were opened to offer health care in global standards. Polio vaccination was made compulsory to children below 5 years to eradicate polio. New medical colleges and hospitals were sanctioned. Life expectancy has improved. Life expectancy of an Indian has improved to 69.1years (2018) from 61.09 years (1995). India had 7,50,000 doctors and 1.1 million nurses (2014). India has 1 doctor to attend to 11,000 people (2018). World Bank stipulates 1:1,000. Changing pattern is witnessed in people shifting to private hospitals for treatment, compared to the public hospitals in both the rural and urban sectors.

**Impact of Growth: Indians availing Private Health Services (in %)**

	Rural		Urban	
	Govt. Hospitals	Private Hospitals	Govt. Hospitals	Private Hospitals
1995-96	43.8	56.2	43.1	56.9
2004	41.7	58.3	38.2	61.8
2014	41.9	58.1	32	68

\*Source: NSSO

Health is a state subject in India, meaning it is the responsibility vested with the State Governments and not the responsibility of the Central Government like

China. Despite policy reforms, India’s ranking in the world in quality healthcare and access is 145/195 countries (2016 Lancet study). Out of a population of 135crore, only 35crore have any coverage for health. That is, only 27% of Indians have health insurance coverage. 80% of the Indians who have any health insurance are sponsored by Government schemes. With the world pressing towards Universal Health Coverage, the data of India under health insurance coverage is low. Data shows Indians make 70-80% out of pocket expenses for their treatments, resulting in enormous financial pressure on Indian households, leading to poverty. The government spending on health is 1.4% of GDP (budget 2019figure) in contrast to 6%, which is the world average. India spends less than some of its neighboring countries like Bhutan (2.5%), Sri Lanka (1.6%) and Nepal (1.1%). The central Govt. proposes to increase this to 2.5% by 2025. The budget for the ministry of health and family welfare (2019) was 52,800 crore.

**CHINA**

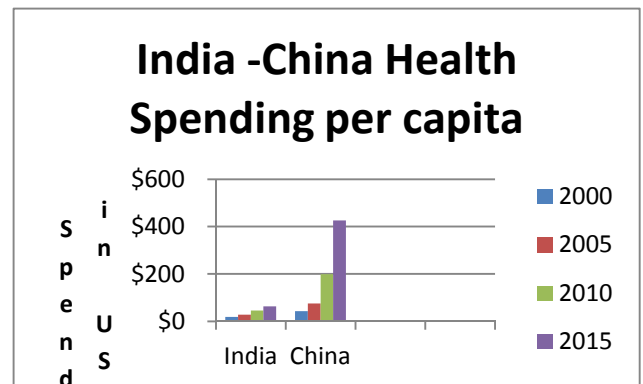
China aims to provide fair and affordable health to its entire population. Health Care reforms initiated in China after the 1980s by the Chinese government has improved the quality of health care in China. Technology has been embraced in the healthcare sector by importing medical devices to their hospitals, thereby providing quality health, though the medical costs are expensive. Health care which was predominantly state owned has seen changes in public private partnership. The impact of economic growth is witnessed in the rising number of hospitals in China. China had only 9,900 hospitals in 1980. This went up to 18,700 in 2005. There were 27,600 hospitals in 2015. In 2017, the figure rose to 31,056 hospitals (Of this, 16,900 hospitals were private hospitals, almost 57.2% of hospitals in China). China boasts of almost 98% health coverage to its citizens, meaning every

Chinese citizen has access to primary healthcare. Life expectancy at birth has improved to 75.7 years (2018) as compared to 71.38 years in the year 2000. China will have 20% of its population ageing 65 years and more by 2030, as a result of its health care reforms (Sarah L Barber 2014). Life expectancy in China has increased by nearly 30 years since 1960, due to improved living conditions, medical care facilities and nutrition. China’s health expenditure as percentage of GDP was 5.5%. Health spending as share of GDP is the highest in the United States, which spends about 18% of its GDP on health. Countries with higher income levels show higher spending on health at 8.2% on world average. Nearly 60% of health funding in China is made by the Government.

**Health spending per capita in US dollars**

	2000	2005	2010	2015
<b>India</b>	\$19	\$28	\$45	\$63
<b>China</b>	\$43	\$75	\$199	\$426

\*Source: WHO



Average per capita government spending on health has doubled in both the nations, as the nations witnessed Economic Growth. The spending has gone up by 8.9 times in China and 2.3 times in India. The world average of health expenditure per capita stood at US dollars 1,000(2016). China

and India fare poorly when compared to the global average.

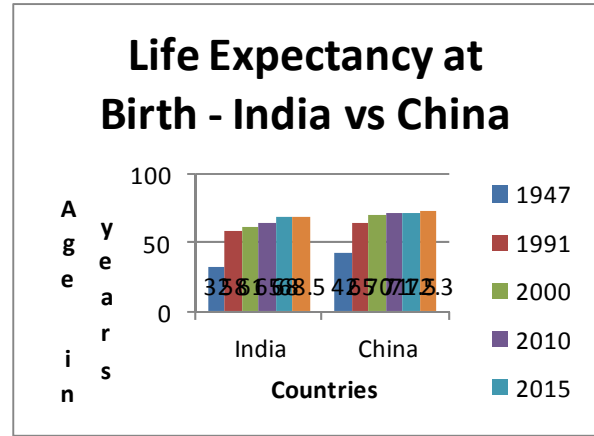
**2.Life Expectancy at Birth for India and China (Has the life expectancy at birth improved for India – China?)**

Life Expectancy at birth refers to the average number of years a newborn is expected to live, if mortality patterns prevalent during the time of its birth remain constant in the future.

Has the life expectancy improved after Economic growth? The answer is YES to both the countries for India and China.

The Life expectancy at birth for India stood at 32 years during its independence. It leaped to 58 years when the Economic reforms were initiated. The impact of Economic reforms on the health sector reveals an increase in life expectancy by 10 years. But it is 4 years below China. China on the other hand, had a life expectancy at birth of 42 years during 1950. The impact of growth has seen a great leap in the life expectancy by about 30 years. That’s a phenomenal impact.

	1947	1991	2000	2010	2015	2018
<b>India</b>	32 year s	58 year s	61 year s	65 year s	68 year s	68.3 year s
<b>China</b>	42 year s	65 year s	70 year s	71.5 year s	72 year s	72.3 year s



**3.Quality of Health Care Compared (Has the quality of health care improved in India- China after witnessing economic growth?)**

**INDIA**

WHO recommends a doctor to population ratio of 1:1,000. When skilled doctors and nurses are employed, the quality of healthcare improves (Afonso Oscar and Sarabanda Ana 2016). The National Health Profile data reports that India had one Government doctor for 11,082 people. (1:11,000) 2003 data shows India had 0.6 doctors per 1000 population and 0.9 hospital beds for 1000 population. As on March 30, 2019, India had 10,22,859 allopathic doctors registered with the Medical Council of India.

<b>No. of Doctors per 1,000 population</b>					
	1960	1991	2000	2015	2018
<b>INDIA</b>	0.21	1.23	0.53	0.7	0.7
<b>CHINA</b>	1.07	1.55	1.25	1.81	1.8

\*Source: World Bank

China has exceeded the WHO recommendation of 1:1000. It has 1.8 doctors to a 1000 population. The number of doctors per 1000 population is seen to be steadily rising over the years after initiation of Economic reforms. More doctors per 1000 means, more availability of doctors. This results in quality diagnosis and health

treatment of patients. The quality of health has been positively impacted by Economic growth in China.

#### **4. Universal Health Coverage Compared (What percentage of the Indian / Chinese population has health insurance coverage?)**

**Universal Health coverage means** everyone in the country can get medical services they need without going bankrupt. In 2009, the Government of China introduced Comprehensive health care reforms to attain universal health coverage by 2020. The goal of the health reform was to expand insurance coverage to 90% of their Chinese population. The Government allocated nearly USD 124 billion towards subsidizing the insurance premiums, in order to encourage people to enroll in insurance schemes. The Government bore 80% of the premium charges to regions where the average income was low, and bore up to 70% of the premium to wealthier regions whose income levels were high. The Chinese population is covered under three insurance schemes – the EMI scheme, the NCMS scheme and the URBMI scheme. Only 15% of the Chinese people were covered until 2000. By 2011, nearly 95% of the population had coverage.

Health expenses are either covered by Govt. subsidies, insurance policy or by out of pocket by the individual. Almost the entire population of China is covered by the state insurance policy, yet the medical costs are very high, that the Chinese keep paying it from their pockets to meet their medical expenses. (Zhou 2018).

Thailand achieved Universal Health Coverage in 2002, with three public health insurance schemes covering the entire population. India opened health insurance to private players in the year 2000, through which 300 million new health insurers were

ushered in India. More than 80% of the Indian population does not have a health insurance coverage. The insurance coverage available to Indians are the RSBY scheme for unorganized workers and for people living under the poverty line (living under \$1.90 dollar per day), CGHS for Govt. employees and ESI for organized workers. RSBY scheme gives insurance coverage up to Rs.30,000/- for a family of five, towards in-patient treatment only. Big Companies cover their employees through private health insurance, offering cover to their spouse, children and even parents for up to Rs.2,00,000/-. The Modi Government has introduced a National Health Protection scheme, a health insurance covering up to Rs.1,00,000/- to the families living under poverty line.

In India, Health is the responsibility of the State Governments and not the Central Government. Therefore States have implemented their own health insurance schemes across India. States such as Andhra and Tamil Nadu have been able to bring 50% of their state population under an insurance scheme. In 2010, up to 300 million people in India had some health insurance coverage, up from 55 million in 2003-04. In China, the centre takes the responsibility of the health of its citizens.

#### **1. Number of Hospitals and hospital beds available to the population Compared**

##### **INDIA**

India ranks lowest in the world rank, with 0.9 hospital beds per 1000 population, one of the countries against a global average of 2.9 beds per 1000 (2012). It had 0.5 beds per 1000 in 1960. The U.S. has 3.1 beds per 1000 people.

India had 32,048 hospitals (Govt. & private) registered in the National Hospital Directory of the Government of India as on March 2019.

**CHINA**

The number of hospitals in China grew at 2.5% on a year-on-year basis between 1980 and 2010, taking the number from 9902 to 20918. Specialty hospitals fitted with modern technology and medical equipments increased at 9.4% between 2000 and 2010. China witnessed a 3.7 fold increase in the number of very large hospitals (hospitals with more than 800 beds) between 2000 and 2010. As of November 2018, China had a total of 32,000 hospitals. Of which 12,072 were public hospitals and 20, 404 were private hospitals. Although private hospitals are on the increase, unlike India, Chinese people prefer public hospitals to private hospitals. Public hospitals have 89% of hospital beds and 92% of out-patient visits and hospital admissions (2014).

	1980	1990	2000	2010	2017
No.of General hospitals	7859	10424	11872	13681	18921
No.of specialized hospitals	694	1362	1543	3956	7220
No. of hospitals	9902	14377	16318	20918	31056
Total health care institutions	180,553	1,012,690	1,034,229	936,927	986,649
Beds per 1,000 population				3.58	5.72

**2. Out of Pocket Health Expenditure Compared (How affordable is health to the average Indian / Chinese?)**

**INDIA**

The expenses made towards medical care, which are not re-imbursed by insurance companies are out of pocket health expenses. They are private expenses made by the households.

Studies reveal that India has very high Out of pocket health expenses. 70-80% of the hospital expenses met by Indians are out of pocket expenses, pushing people to poverty. (Puja Mehra 2014) In the US and UK, they are about 20%. During 1995-96, Indians spent Rs. 3,561/- as out of pocket expenses for hospitalization and treatment. In 2014, this figure shot up to Rs. 18,268/- , as per a NSSO report.(Jyotsna Singh and Nikita Mehta 2016). Indian households spent Rs. 3,02,425 crores as Out of Pocket Expenditure in the year 2014-15.(Kumar D 2018)

Healthcare and treatment costs are going up in India by 10-12% every year, making healthcare expensive. Surveys in South India reveal households pledging and selling assets to pay for their hospitalization expenses. Quality health care is not affordable to most of the population of India, because of the costs involved. The rich, educated, urban mass with a better socio-economic status are able to demand quality health care and facilities.

According to WHO, when healthcare expenditures exceed 40% of a household’s income, it becomes catastrophic, since the health expenses eat into the basic needs of the households, resulting in debt.

6 crore of people fall into poverty due to Out of pocket expenditure in India. (Mathew 2019).

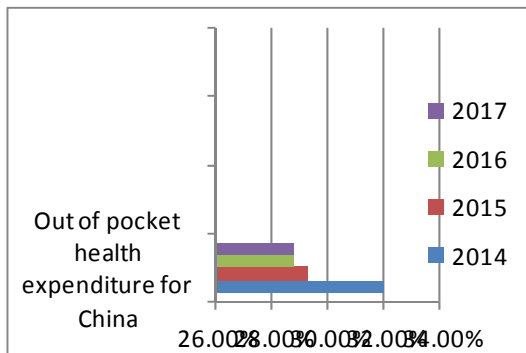
**CHINA**

The following table reveals the increase in health expenditure made by Chinese households. There is an increasing trend in the pattern of health expenditure, from 4% in 2013 to about 6% in 2016.

(yuan)	2013	2014	2015	2016
Per capita income	18310.8	20167.1	21966.2	23821
Per capita expenditure on health and medical services	912.1	1044.8	1164.5	1307.5
Education, cultural, recreation	1397.7	1535.9	1723.1	1915.3

\*Source: China Statistical Year Book 2017

The out of pocket health expenditure for China has come down from 32% in 2014 to about 29% in 2017.



\*Source: China Statistical Yearbook 2017

**3. Government’s spending on Health Compared**

**INDIA**

Looking at the health expenditure of India, as percentage of GDP, it is slightly above 1%. US ranks no.1 in the world spending about 13% of their GDP on health. Wealthy nations tend to spend above 7% of

their GDP on health. Comparing India with China, China spends more than 6% of its GDP on health. China also leads India in per capita health spending by 6 times more than India. India spends \$63 per person on health, whereas China spends \$426 per person on health. India believes in a public private partnership model and is depending heavily on the private players to make investments in the health sector, unlike China, wherein the Government spends significantly higher than the private players. The Modi Govt. has set a target of raising the health spending to 2.5% of GDP by 2025.

INDIA	2014	2015	2016	2017	2018
Health expenditure as percentage of GDP	1%	0.98%	1.02%	1.17%	1.3%

**CHINA**

Health expenditure as percentage of GDP for China has increased from 3% in 1980 to 6.23% in 2016. The Chinese Government has been investing hugely into the health of its citizens. The year on year allocation to health has been continuously increasing and China is one of the big spenders of the world on health. The onset of 2009 health reforms saw huge investment in the health sector for China. About \$250 billion were pumped into the health sector, in building hospitals, bringing universal insurance coverage, embracing new technology and thereby greatly improving the access of health care to the Chinese, as compared to the 1980s.

CHINA	1980	1990	2000	2010	2016
Health expenditure as percentage of GDP	3.12 %	3.96 %	4.57 %	4.84 %	6.23 %

### Conclusion:

Healthy people contribute to a healthy economy, to the wealth of the nation's economic growth. Health has a positive impact on the economy (Barro 2013). Countries which invest in health are investing in the growth of their nations. That is why we find high spending on health in the high income nations with high HDI indexes like the United States, Switzerland and Germany. The trend is catching up on the middle income nations as well. Improvements in health and health care has shown to increase income by 24% in the poorest nations, says a UNDP report. The **United Nations** has **Good Health and Well Being** as Goal no.3 in its list of goals to achieve for its member nations, termed as Sustainable Development Goals.

Half of the world's population does not have full coverage of health services. (World Health Statistics 2018) 11.7% of the world's population (808 million people) spent at least 10% of their budgeted income for health expenses, in 2010, reports WHO. And 1.4% of the world's population (97 million people) have been pushed into poverty due to Out of pocket expenses.

India is one among the 76 countries (out of a total 194 member countries of WHO) which has less than the recommended doctor to population ratio. Public health care is free in India for those who live below the poverty line, people living with an income of less than \$1.9 per day. There is a need for private hospitals like Aravind Eye Hospitals to rise up in India, where in two-thirds of their patients have received free or subsidized

care, since its inception 40 years ago (Govindarajan Vijay 2014). Health spending in India by the Government of India has hovered around 0.9% to 1.7% of GDP. The per capita spending on health in India is close to Rs.540/- per person, one among the lowest spenders in the world. Indian households have been making up to 72% out of pocket expenditure to meet their health services. India aims to achieve Universal health coverage by 2022. Less than 20% of Indians are covered under a health insurance. The private sector in India is rich with its medical care facilities. **Over 75 per cent of the human resources, 68 per cent of an estimated 15,097 hospitals and 37 per cent of 623,819 total beds in the country are in the private sector(2012)**. The Government will have to take help from private service providers. The Government trying to provide all the services may not be feasible in the short to medium term.

China has been contributing significantly in health spending since it initiated reforms in 2009. Although there is the rural-urban divide clearly in China, where the urban population tend to enjoy the expertise of specialist doctors, hospitals with modern technology and medical equipments, China has been making heavy investments in primary care facilities, in improving insurance coverage and in reducing out of pocket expenditure for its citizens. (William Hsiao). China may boast of 95% health coverage, yet China has to make progress in providing quality and affordable health care to all its citizens. As of now the rich and urban residents enjoy the benefits of its health reforms more than the poor and rural residents.

The 21<sup>st</sup> century has ushered in the development of dynamic growth for the two nations, India and China. India and China have become drivers of global growth (Srinivasan 2013). Health cannot be



compromised if the nations desire to deliver sustainable growth.

Health care services should be both accessible and affordable to all the citizens of the country, across the rural-urban, the rich-poor and men-women population (IPH UHC team 2012). This is indeed a challenge thrown to every Government across the world. India and China are working alongside these lines. Chinese performance in the health sector outweighs India and there is a lot of scope for India on the health sector. Governments cannot ignore this sector because, one of the key driver to Growth is a Healthy population.

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