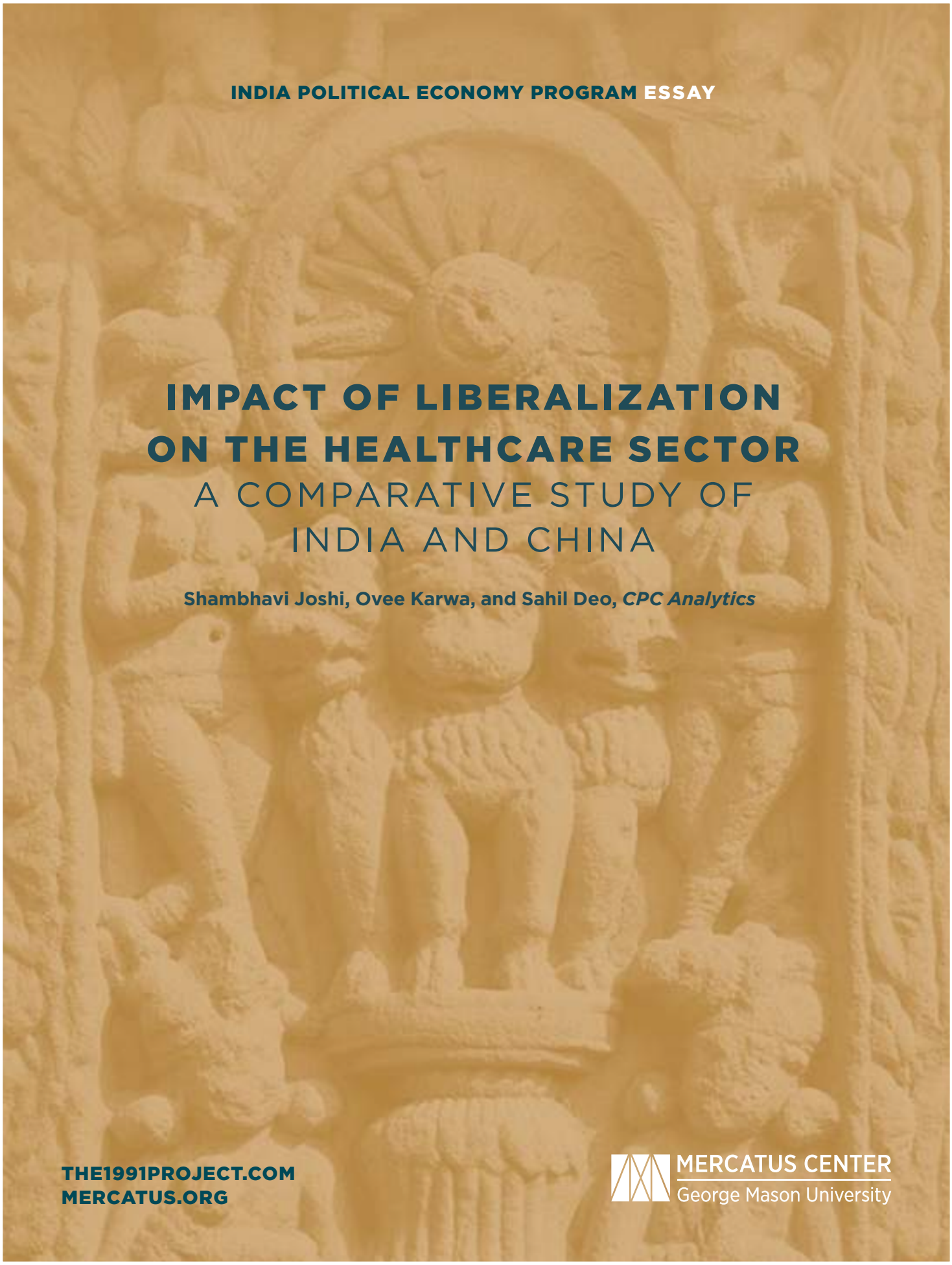

INDIA POLITICAL ECONOMY PROGRAM ESSAY

IMPACT OF LIBERALIZATION ON THE HEALTHCARE SECTOR

A COMPARATIVE STUDY OF INDIA AND CHINA

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SUMMARY

This essay explores the impact of economic liberalization on healthcare sectors in India and China, focusing on policy changes and their effects on healthcare accessibility, affordability, and quality. While India has continued to promote the process of liberalization and privatization through policies such as encouraging foreign investment, China, after initial liberalization efforts, has reasserted government control over the healthcare sector. The essay draws parallels and distinctions in the healthcare trajectories of both countries.

Keywords: Healthcare reform; India; China; 1991 economic reforms; privatization; public health policy; India political economy

JEL codes: I18, O43, P52, O53, P11

On the cover: Pillar of Ashoka (detail) at Sanchi, Madhya Pradesh, India. The pillars of the emperor Ashoka the Great (268–232 B.C.), renowned for their polished sandstone and intricate carvings, were dispersed throughout the Indian subcontinent and carried imperial edicts promoting moral and ethical conduct. The Lion Capital of Ashoka, which tops the pillar at Sarnath, Uttar Pradesh, has been adopted as India's national emblem. Twenty of the pillars of Ashoka still survive.

A strong healthcare system is an essential part of a country's quest to achieve a strong economy and ensure sustainable development. The golden triangle of ideal healthcare comprises accessibility, affordability, and quality. To guarantee the existence of all three conditions, healthcare must play a key role in governance and government strategies all over the world.

China and India are similar in many ways. They are home to the largest populations in the world and have rapidly developing, big economies—although there is a stark difference in GDP between the two countries. In the 20th century, they endured a volatile environment due to political turmoil and socioeconomic unrest. They have experienced changes in governance, law and order, and society. Inevitably, their healthcare systems have undergone several transitions and are constantly developing in conjunction with the political and socioeconomic situation.

The sweeping economic reforms that were introduced in India and China in the latter part of the 20th century had significant effects on the healthcare sector. This paper aims to compare the healthcare systems of the two countries. Major economic reforms after the 1980s introduced policies that supported liberalization and privatization, which led to an increase in foreign direct investment, an expansion of the private sector, and the introduction of highly advanced technology that seeped into all sectors of the economy. An in-depth study of these changes reveals that, while the Indian government welcomed the policies and let them flourish, the Chinese government, since 2003, rolled back the policies.

The performance of the two countries' healthcare systems over the years has been compared on the basis of three indicators: the maternal mortality rate (MMR), the infant mortality rate (IMR), and out-of-pocket expenditure (OOPE). The results show that MMR and IMR have gone down significantly but OOPE, though has reduced over the years, continues to be high in both countries.

REFORMS IN INDIA

Following a balance of payments crisis in 1991, India made crucial reforms to its economic policy. The government aimed at reforms that would encourage the expansion of the private and foreign investment in the country. The major policy changes included removing the Licence Raj, reducing import tariffs, deregulating markets, lowering taxes, and boosting foreign investment in modern technology by paving the way for private-sector enterprises and by relaxing the rules that govern how foreign companies could enter the Indian market.[1]

From 1991 to 1996, foreign investment grew from INR 132 million to 5,325 million. The GDP rate of growth doubled between 1990 and 2000, increasing from 7 to 14 percent, respectively. The social environment in the country also improved; poverty declined from 36 percent in 1993 to 26 percent in 1999.[2]

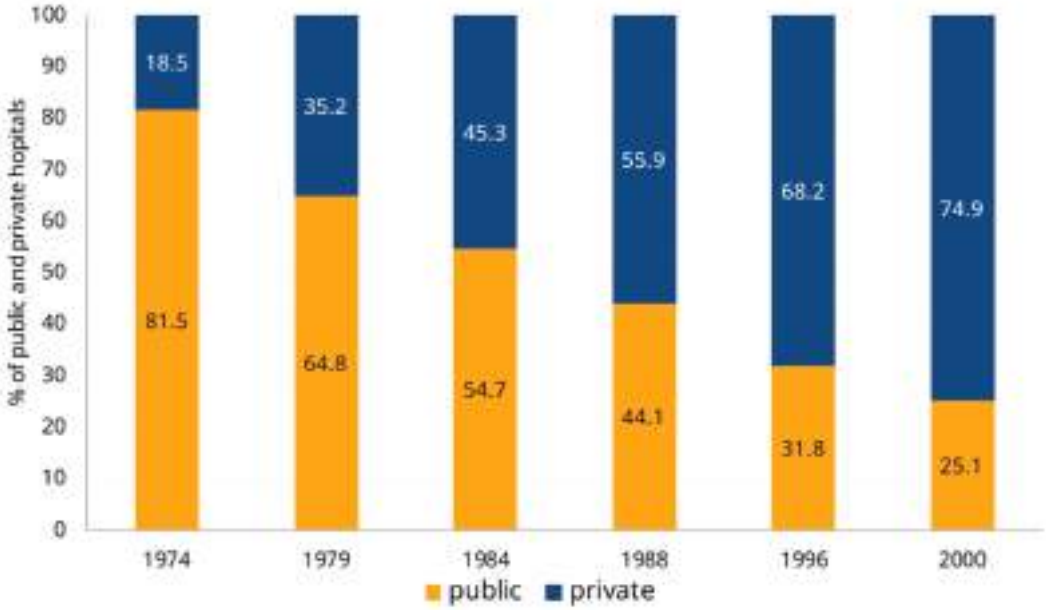
1947–1986: THE ERA OF PROTECTIONISM AND STATE EXPENDITURE ON HEALTHCARE

The people of colonial India largely depended on traditional systems of medicine (Ayurveda and Unani) and in some cases on mission hospitals. India's healthcare philosophy post-independence originated in the *1946 Report of the Health Survey and Development Committee*, commonly known as the *Bhore Committee Report*. This report established the goal of ensuring universal access to healthcare regardless of the wealth of the patient. Healthcare was seen as the responsibility of the state. In the first few decades after independence, the state invested in primary health centers and sub-centers and community health centers, with an emphasis on integrating curative and preventive medicine at all levels. Healthcare was rural-prioritizing and government-dominated.[3]

The Indian pharmaceutical market at this time was dominated by Western multinational corporations, which controlled 80–90 percent of the market and almost all the patents. In the first few decades after independence, the indigenous sector was engaged mainly in the processing and formulation of medicines based on imported fine chemicals and bulk drugs. The government since the very beginning relied heavily on foreign capital for medical and drug technology and

1. Samantak Das, Indranil De, and Sanjib Pohit, "Health Sector Reforms in India: A Situation Analysis," August 14, 2008, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1224651.
2. Centre for Civil Society, "India before 1991: Stories of Life under the License Raj," accessed March 15, 2023, https://ccs.in/node/554.
3. National Coordination Committee, Jan Swasthya Abhiyan, *Globalisation and Health*, October 2006, http://phmindia.org/wp-content/uploads/2018/06/JSA_Globalisation_and_health.pdf.

FIGURE 1. PERCENT OF PUBLIC AND PRIVATE HOSPITALS AS A SHARE OF ALL HOSPITALS IN INDIA



Source: Shailender Kumar Hooda, "Private Sector in Healthcare Delivery Market in India: Structure, Growth and Implications" (Working Papers 185, Institute for Studies in Industrial Development, New Delhi, India, 2015), https://ideas.repec.org/p/sid/wpaper/185.html.

equipment. Foreign companies formed subsidiaries in India that acted as trading units for drugs.[4] This period was also characterized by protectionist policies such as the Patents Act of 1970, which abolished drug patents and made local production mandatory.

Reforms during this era significantly strengthened the Indian pharmaceutical landscape. The regime of intellectual property protection under the Patents Act was a turning point in the flourishing of domestic pharmaceutical research and development. Indian-owned firms' share of total pharmaceutical production in the country increased from 27 percent in 1975/76 to 52 percent in 1980/81. The National Health Policy in 1983 mentioned leveraging the private sector and voluntary agencies to increase access to primary healthcare. Until the early 1980s, the hospital sector was dominated by public-sector facilities that were tax funded, leaving the private sector with a relatively limited role. Figure 1 depicts the percent of public and private hospitals as a share of hospitals in India.

4. Reji K. Joseph, *Pharmaceutical Industry and Public Policy in Post-reform India* (London: Routledge India, 2015).

1986–1991: THE GRADUAL TURN TO LIBERALIZATION

By the end of the 1980s, Indian generic firms had come to be known around the world for their competence.[5] One of the major changes during the 1986–1991 period was the introduction of the DPCO (Drug Price Control Order). It allowed the central government to fix the formulations and prices of essential bulk drugs in India. The DPCO meant that, to maximize profits, pharmaceutical companies reduce the production of drug categories that were subject to price control. Since the manufacturers were not compelled to produce these essential drugs, there was an acute shortage in the market. Hence, 1987 DPCO reduced the number of drugs subject to price regulation and the number of drugs reserved for production by the public sector.

Today, the NPPA (National Pharmaceutical Pricing Authority) fixes and revises prices, enforces the provisions of the DPCO, and monitors the drugs that have controlled prices.[6]

1992 ONWARD: LIBERALIZATION OF THE MARKET

The progression toward a liberalized economy also led to an increase in foreign investment in the hospital sector, medical devices manufacturing, pharmaceuticals manufacturing, and the insurance sector. As foreign investment in healthcare increased, the government's spending decreased. Post-1991, the Indian government's total expenditure on healthcare was 1 percent of the GDP, much lower than in other BRICS countries.[7] This led to an exponential rise in OOPE for the population. Over the years, 65 to 72 percent of total expenditure on healthcare per capita in India was paid out of pocket.

One major reform in healthcare provision occurred in 1992, during the eighth five-year plan, with the introduction of user fees according to the mandates of the World Bank.[8] This change meant that people who could pay for their healthcare were levied fees to subsidize services for those who could not.

In addition to reducing expenditure on healthcare, the reforms shifted the responsibility for healthcare from the central government to the states. This

5. Joseph, *Pharmaceutical Industry and Public Policy*.
6. Akram Ahmad, Muhammad Umair Khan, and Isha Patel, "Drug Pricing Policies in One of the Largest Drug Manufacturing Nations in the World: Are Affordability and Access a Cause for Concern?," *Journal of Research in Pharmacy Practice* 4, no. 1 (2015).
7. Kiran Mazumdar-Shaw, "The Healthy Competition of an Open Market," *Livemint*, January 21, 2021. BRICS stands for Brazil, Russia, India, China, and South Africa.
8. Sakthivel Selvaraj et al., *India Health System Review* (New Delhi: World Health Organization, 2022).

decentralization resulted in a division of responsibilities. The central government focused on launching health programs and schemes; developing and monitoring national health policies, standards, and regulations; and providing funds to the states. The states focused on hospital management, sanitation, resource allocation, education, provision of medicines, and prevention of communicable diseases.

The real impact of the economic reforms was felt after the Drug Policy of 1994 and the 1995 DPCO, when restrictions on the use of imported bulk drugs and on industrial licensing were abolished. Bulk drugs and formulations subject to controls were reduced from more than 350 to 74. These changes caused a steep, sometimes double-digit increases in drug prices, especially for drugs that had been under a price freeze.[9] Nevertheless, it was essential that pharmaceutical companies do not lose interest because of decreased margins in order to keep research and development momentum high and avoid production of substandard medications.

Perhaps the most significant reform between 2001 to 2010 was the Patents Amendment Act of 2005, which re-allowed drug patenting. The act was part of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement, which India signed in 1995. It led to a sharp increase in research and development on pharmaceuticals. It also changed the research orientation to product innovation, such as novel drug delivery systems, new drug development research, and biopharmaceuticals.[10] It was only in 2013 that a new DPCO was launched, which regulated the prices of 348 essential medicines. Amendments to the 2013 DPCO, such granting five years of patent protection to manufacturers regardless of their origin, encouraged foreign firms to introduce their drugs into the Indian market sooner.[11] India is currently one of the world's largest suppliers of generic drugs and vaccines, producing 20 percent of the global supply of generic drugs and 60 percent of the global vaccines.

While liberalization benefited the pharmaceutical market immensely, the withdrawal of state funding from healthcare and the mushrooming of private practice raised citizens' OOPE. As of 2019, nearly 13 percent of all medicines sold in India's retail segment are price controlled using a market-based

9. Prachi Singh, Shamika Ravi, and David Dam, *Medicines in India: Accessibility, Affordability and Quality* (New Delhi: Brookings India, 2020).
10. Atsuko Kamiike, "The TRIPS Agreement and the Pharmaceutical Industry in India," *Journal of Interdisciplinary Economics* 32, no. 1 (January 2020).
11. Singh, Ravi, and Dam, *Medicines in India*.

price-regulation method.[12] Although the twelfth five-year plan recommended the abolishment of user charges, these charges continue to be present in the secondary- and tertiary-level public-sector healthcare facilities across states.[13]

Insurances entered the market mainly post-liberalization. An increase in the number of private healthcare facilities has improved the accessibility and quality of the services provided, and these improvements have encouraged people to invest in health insurance policies.[14] India's insurance-sector stakeholders include both private health insurance providers and the Insurance Regulatory and Development Authority of India.

The government has also launched various schemes and programs for the underprivileged. As of 2021, less than 40 percent of the population has health insurance in one-third of Indian states. Seventy-five percent of people in Andhra Pradesh has health insurance, which is the highest percentage in India. In 2017/18, there was immensely low uptake of commercial insurance; only 37 percent of the Indian population had any kind of health coverage. While the PM-JAY (Pradhan Mantri Jan Arogya Yojana) covers inpatient services and appears to have greater access to inpatient care at hospitals, it is too early to judge whether there has been any significant reduction in households' OOPE—a primary goal of the scheme—especially since approximately 66 percent of OOPEs are derived from outpatient care. Moreover, the PM-JAY currently has enrolled only 53 percent of private facilities in the country, which means that almost half of these facilities are not obligated to provide services that are reimbursed by the insurers.[15]

Private practice, particularly in the form of corporate hospitals, has mushroomed since the 1990s. As of 2017/18, the private sector is responsible for 70 percent of outpatient care and 58 percent of inpatient care, dominating both rural and urban areas. The prices charged for similar treatments in the private sector are around four to eight times higher than in the public sector.[16] To tackle heavy OOPE, the government launched various schemes, the most recent being PM-JAY in 2018 (which replaced the earlier insurance scheme called Rashtriya Swasthya Bima Yojana) and Pradhan Mantri Bhartiya Janaushadhi Pariyojana in 2008.

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12. Singh, Ravi, and Dam, *Medicines in India*.
13. Selvaraj et al., *India Health System Review*.
14. Das, De, and Pohit, "Health Sector Reforms in India."
15. Selvaraj et al., *India Health System Review*.
16. Shailender Kumar Hooda, "Health System in Transition in India: Journey from State Provisioning to Privatization," *World Review of Political Economy* 11, no. 4 (Winter 2020): 506–32.

India's major healthcare successes, such as longer life span and the reduction in maternal and infant mortality as well as the eradication of polio and smallpox, have been possible because of sustained efforts by the states to ensure universal vaccination and greater reach. But India continues to be burdened by communicable diseases such as tuberculosis, and in recent decades, it has felt the growing burden of noncommunicable diseases such as cardiovascular diseases, cancer, chronic obstructive pulmonary disease, and diabetes.[17] In light of the current dominance of private healthcare, it is imperative that the private sector be effectively leveraged to increase surveillance and monitoring of communicable diseases and to spread awareness about them, and that it be effectively regulated to reduce the OOPE on healthcare.

REFORMS IN CHINA

In 1979, Deng Xiaoping became the leader of a country with a stagnating economy. To revive the economy, he announced radical economic reforms that aimed to replace the command-and-control economy with a market-oriented economy while maintaining the country's commitment to Marxism-Leninism ideology. This unique form of governance is known as "socialism with Chinese characteristics,"[18] and it continues to be a part of Chinese governance. The economic reforms were carried out in a two-stage process that changed China's economy forever.

The first stage, in late 1970s and early 1980s, comprised the decollectivization of agriculture and the removal of barriers to open China's economy to foreign investment and enable entrepreneurs to set up businesses. These reforms increased agricultural production by 20 percent. China also created special economic zones to establish flourishing private-owned businesses.

The second stage, in the 1990s, witnessed the rise of privatization, the decentralization of governance, the dissolution of unprofitable state-owned enterprises, the easing of protectionist policies and replacing them with market-friendly regulations, the reduction of tariffs on international trade, the elimination of quotas and licenses, and the opening up of major service-sector industries such as insurance, banking, and telecommunications. These reforms affected the healthcare sector as well as many other sectors of the economy.

17. Selvaraj et al., *India Health System Review*.
18. Deng Xiaoping, "Building Socialism with a Specifically Chinese Character," *People's Daily* (Beijing), June 30, 1984.

Further efforts to implement transparency mechanisms and intellectual property rights and to abide by international standards and rulemaking led to China's accession into the World Trade Organization in 2001. Together, the reforms resulted in an average GDP growth of almost 10 percent and lifted 800 million people out of poverty.[19]

1949–1979: THE ERA OF COMMAND AND CONTROL

Before the Chinese Revolution of 1949, the country's healthcare was dominated by the private sector. Traditional Chinese medicine was advised by private practitioners in both rural and urban areas. The creation of the People's Republic of China in 1949 changed the political, social, and economic environment. The Ministry of Health took control of the healthcare sector and, under Mao Zedong, the private ownership of healthcare facilities and private practice of medicine were considered wrong—incompatible with socialism—and were banned.

From 1950 onward, three tiers of health facilities were created: village clinics, township health centers, and county hospitals. Access to healthcare and the quality of healthcare were relatively better in urban areas than in rural areas.[20] By 1967, all private practices have been either eliminated or converted into public hospitals.[21] The nationalization of medical human resources meant (1) enlisting private practitioners into state employment and (2) controlling the education system of new practitioners.

Committed to putting the country's healthcare activities onto the world stage, the People's Republic of China promoted acupuncture, traditional Chinese medicine, and a unique model of primary and rural universal healthcare utilizing community health workers. Mao Zedong's vision was to unify Chinese medicine and biomedicine to produce a new form of medicine.[22] During this time, China's pharmaceutical sector developed in an environment relatively isolated from international markets. Manufacturing and production largely focused on fulfilling the demands of the country's population. More than 90 percent of the

19. The World Bank, "The World Bank in China," last updated September 29, 2022, https://www.worldbank.org/en/country/china/overview.
20. Julia Métraux, "These Posters from Mao's China Taught Public Health Awareness," *JSTOR Daily*, May 5, 2021.
21. Jiong Tu, "Health Care Transformation in China—the Privatisation and De-Privatisation of Health Care in a Chinese County," *Journal of Cambridge Studies* 8, no. 3–4 (2013).
22. Paul Kadetz and Michael Stanley-Baker, "About Face: How the People's Republic of China Harnessed Health to Leverage Soft Power on the World Stage," *Frontiers in Human Dynamics*, February 3, 2022.

pharmaceutical companies were domestic companies, with only a few foreign companies engaged in the distribution of medicines.

For 30 years, from 1949 to 1979, the People's Republic of China witnessed many achievements in the healthcare sector. Life expectancy rose from 35 to 68 years and IMR declined from 195 to less than 50 per 1,000 live births. The country boasted a universal coverage system that created a low-cost, wide-coverage primary healthcare model for China's low per capita income. Public hospitals in urban areas provided very cheap or free healthcare services. In rural areas, practitioners with basic, minimal medical or paramedical knowledge, known as barefoot doctors, provided healthcare to people at very low cost and worked to promote a hygienic lifestyle and family planning.[23] Barefoot doctors are considered one of the greatest triumphs of healthcare in the Mao era.

1979–2003: ECONOMIC REFORMS AND PRIVATIZATION

China's healthcare sector, pre-reforms, was entirely controlled by the government. But after the implementation of liberal policies, the sector underwent a complete transformation. Between 1980 and 1990, total expenditure on healthcare declined from 36.2 to 25.1 percent of government expenditure[24] (i.e., 3 percent of GDP was dedicated to healthcare). Further, OOPE rose from 20 to 60 percent of health expenditure per capita, resulting in reduced accessibility and affordability of healthcare facilities for the poor population.[25] Decline in public provision of healthcare also led to a decrease in social insurance schemes, from 70 percent of the population to 20 percent between 1981 and 1993, respectively.

A major reform took place in 1998 with the introduction of the Urban Employee Basic Medical Insurance, which was funded by employees and their employers. This was made mandatory for all urban workers and encompassed both outpatient and inpatient benefits. But the benefits depended heavily on the patient's economic background and occupation, and hence they were unevenly distributed.

A weak and fragmented public healthcare system led to underfunding of public hospitals and a lack of treatment subsidies, essentially paving the way for

23. Youngsub Lee and Hyoungsup Kim, (2018). "The Turning Point of China's Rural Public Health during the Cultural Revolution Period: Barefoot Doctors; A Narrative," *Iranian Journal of Public Health* 47 (July 2018): 1–8.
24. Hong Li, Gordon G. Liu, and Christoph Glaetzer, "Financing Innovative Medicines in Mainland China: The Role of Commercial Health Insurance," *Chinese Studies* 2, no. 3 (August 2013).
25. Mit Ramesh, Xun Wu, and Alex Jingwei He, "Health Governance and Healthcare Reforms in China," *Health Policy and Planning* 29, no. 6 (2014): 663–72.

the mushrooming of private healthcare providers—hospitals, healthcare centers, and private practices. Because of weakening restrictions on foreign direct investment and foreign capital, China experienced an influx of foreign investment and the emergence (or reemergence) of the private sector in healthcare.[26]

The diminished role of government also led to a lack of enforcement of regulations and implementation of monitoring mechanisms. From 1979 to 2003, there was total autonomy of the private sector, which operated with negligible government supervision and control.[27] Concentrating too much authority in the hands of providers led to the exploitation of users with expensive and unnecessary medicines and to unaffordable spending on healthcare facilities. These challenges resulted in a severe decline in accessibility for patients who were unable to pay. One study shows that, during the first few years of the 21st century, 35 percent of urban and 3 percent of rural populations could not afford healthcare or opted out of formal care, fearing poverty. This situation exacerbated preexisting disparities in health and healthcare services and reduced the pace of improvement for quality of life and care.

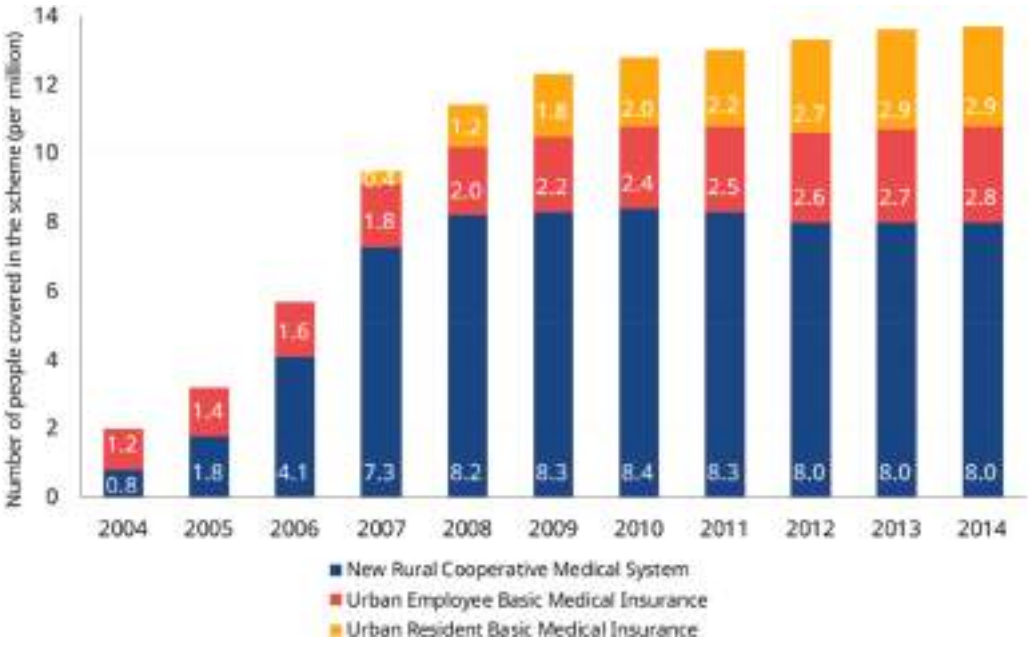
2003 ONWARD: THE TURNING POINT

Noticeable dissatisfaction among the citizens and constant complaints about the healthcare sector were disregarded because of the perceived success of the economic reforms, which was measured on the basis of the exponential rise in GDP. The turning point came with the emergence of the viral respiratory disease SARS (severe acute respiratory syndrome) that blanketed the country in 2003. The spread of the disease became not only a health concern but also a sociopolitical concern, and hence the state's attention was crucial.

The epidemic highlighted the need for government attention to and spending on healthcare facilities and services. The incapability of private healthcare to tackle the disease along with the government's lackadaisical approach to its spread revealed the faults in the market-oriented functioning of the healthcare sector. The government increased its spending on healthcare, focused on improving interdepartmental coordination, and established China's emergency response system to handle public health contingencies. SARS also unveiled the disparities between rural and urban healthcare. The lack of proper awareness,

26. Gordon Liu, Xingzhu Liu, and Qingyue Meng, "Privatization of the Medical Market in Socialist China: A Historical Approach," *Health Policy* 27, no. 2 (February 1994).
27. Ramesh, Wu, and He, "Health Governance and Healthcare Reforms."

FIGURE 2. PEOPLE COVERED BY VARIOUS INSURANCE SCHEMES IN CHINA



Source: Feng Lin et al., "The Innovations in China's Primary Health Care Reform: Development and Characteristics of the Community Health Services in Hangzhou," *Family Medicine and Community Health* 3, no. 3 (2015): 52–66.

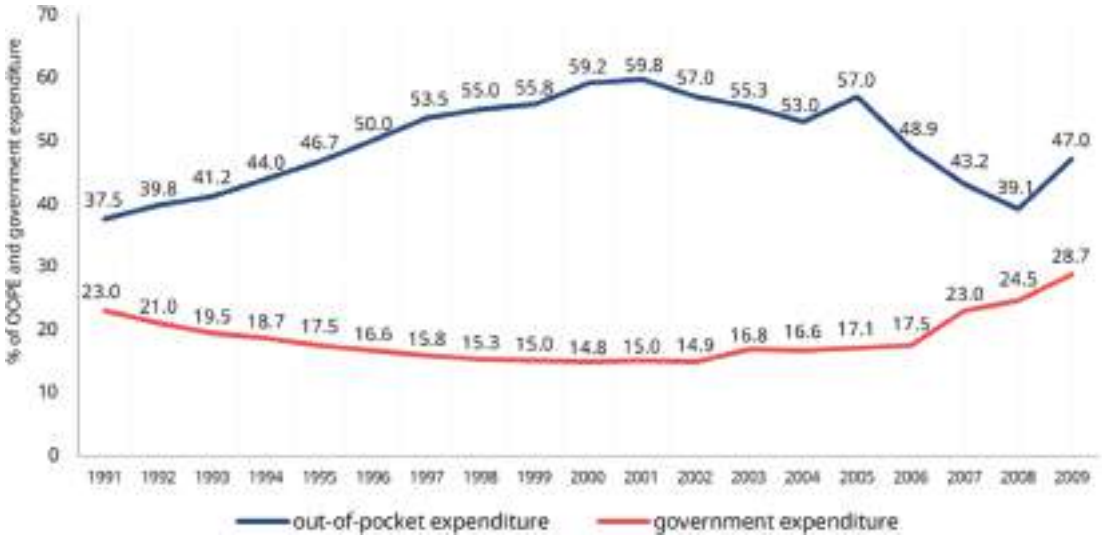
accessibility, and efficiency of healthcare facilities and services in rural China was the main cause for the spread of the disease.[28]

The challenges China faced in 2003 propelled the government to cut back on the level of market liberalization and regain control of the decision-making in the healthcare sector. China launched its most recent crucial healthcare reforms in 2009. The government claimed that these reforms would constitute a complete metamorphosis of the system. It undertook complete responsibility for healthcare provision and promised universal health coverage. The goal was equal and guaranteed access to essential medical and healthcare services for all.

Before the 2009 reforms, the government had launched various insurance schemes (see figure 2), such as the New Rural Cooperative Medical System in 2003, which insured 97 percent of the rural population, and the Urban Resident Basic Medical Insurance in 2007, which insured 60 percent of the urban population. The government's total healthcare spending was 46 percent on medical

28. Sarah L. Barber et al., "The Reform of the Essential Medicines System in China: A Comprehensive Approach to Universal Health Care," *Journal of Global Health* 3, no. 1 (June 2013).

FIGURE 3. OUT-OF-POCKET EXPENDITURE AND GOVERNMENT EXPENDITURE AS A PERCENTAGE OF TOTAL HEALTH EXPENDITURE IN CHINA



Source: National Bureau of Statistics, China.

insurance initiatives, 47 percent on healthcare provision, and 7 percent on promoting good health.

As part of the 2009 reforms, the government introduced stricter rules and regulations and regained control of five essential elements of healthcare: social health security, essential medicines, primary healthcare, basic public health service package (hospital, prescription drugs, and traditional medicine), and public hospitals. Gradually, prevention, control, and response systems were strengthened and vaccinations were made free of cost. There were also efforts to reduce OOPE and make healthcare affordable for all (see figure 3).

As of 2020, more than 95 percent of the Chinese population is covered by state-funded medical insurance.[29] China has launched a system to maintain birth-to-death health records. The OOPE has declined from almost 60 percent in 2000 to 35.2 percent in 2019,[30] the MMR has declined from 28.0 per 100,000 live births in 2000 to 17.8 in 2019,[31] and the IMR has declined from 30.0 per 1,000 births in

29. Li Wang, Zhihao Wang, Qinglian Ma, Guixia Fang, and Jinxia Yang, "The Development and Reform of Public Health in China from 1949 to 2019," *Globalization and Health* 15, no. 1 (2019): 1–21.
30. Knoema, "China—Out of Pocket Expenditure as a Share of Current Health Expenditure," accessed March 14, 2023, https://knoema.com.
31. Lu Chen, Penghui Feng, Lance Shaver, and Zengwu Wang, "Maternal Mortality Ratio in China from 1990 to 2019: Trends, Causes and Correlations," *BMC Public Health* 21, no. 1536 (2021).

2000 to 6.8 per in 2019.[32] China has also emerged as a global supplier of active pharmaceutical ingredients that are necessary in the production of generic medicines. Though China has advanced in terms of healthcare provision, the country faces the challenges of an aging population and increasing noncommunicable chronic illnesses such as diabetes, cardiovascular diseases, and cancer, as well as other lifestyle-related health problems.

The return of the government's strong hold on healthcare has strengthened the sector. The government has made improvements on identifying faults and making progress toward rectifying them, securing effective and affordable healthcare for the majority of the population, and reducing the imbalances in healthcare accessibility. There are still several reforms that are necessary in the sector. But, through experience, China has witnessed that privatization and liberalization of the system was not a long-term solution for the country's robust healthcare services.

COMPARATIVE ANALYSIS

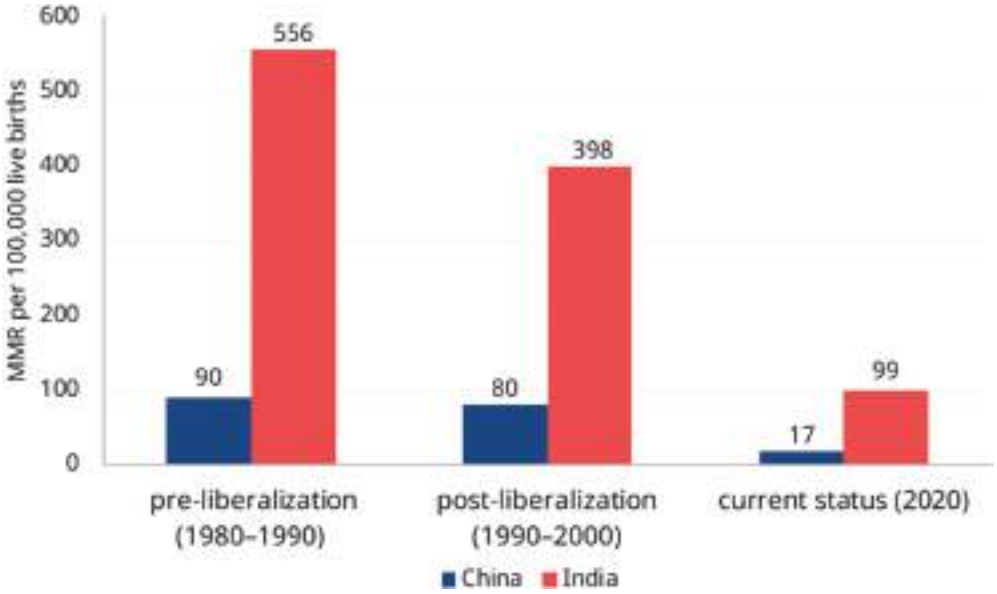
The key health indicators that determine the healthcare status of a country are: the MMR, the IMR, and the OOPE. This section of the paper compares how the two countries fare in achieving a low rate for all three (see figures 4 to 6).

Since 1947, India and China have undergone cycles of changes and reforms in their economies, especially in their healthcare sectors. Though the two countries introduced crucial and similar reforms around the same time, the healthcare sector in India flourished under a liberal, market-oriented economy without state control and regulations, whereas the healthcare sector in China reverted back to being regulated by the government years after the reforms.

In China, 1980 brought about a storm of changes that introduced a market-oriented economy and a massive amount of liberalization and privatization to the healthcare sector. However, the government became apprehensive about the changes that the private enterprises brought. The autonomy of the private sector in healthcare compromised the quality, affordability, and accessibility of healthcare facilities. The greater inequalities, increased OOPE, and decline of the social sector prompted China to reverse its policies, and the government regained control of the healthcare sector. The Chinese government weakened

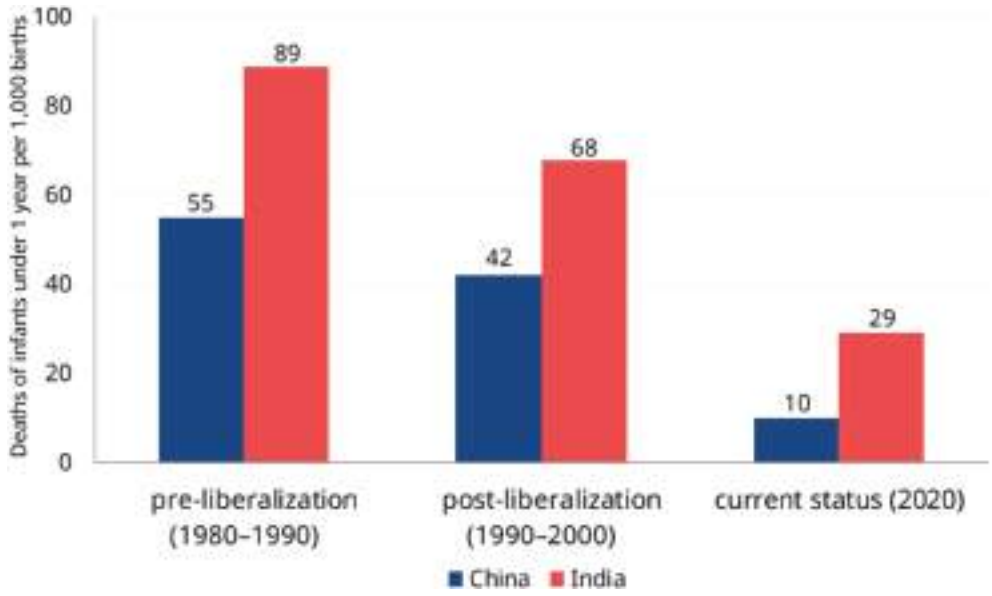
32. Chenran Wang and Tao Xu, "The Trend and Cause of Mortality Burden in Infancy—China, 1990–2019," *China CDC Weekly* 3, no. 16 (April 2021).

FIGURE 4. MATERNAL MORTALITY RATE IN INDIA AND CHINA



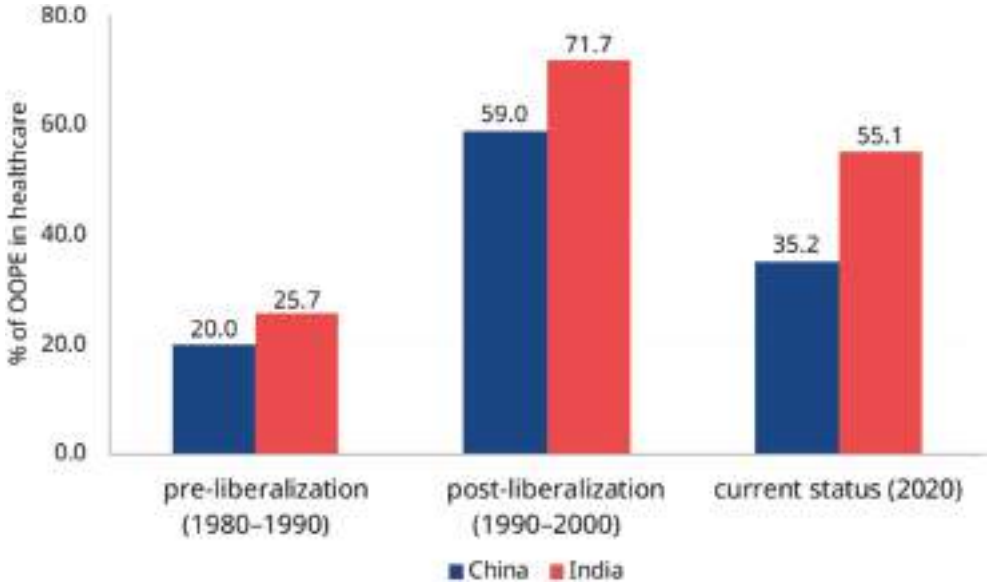
Source: Ministry of Health and Family Welfare, India; and World Health Organization.

FIGURE 5. INFANT MORTALITY RATE IN INDIA AND CHINA



Source: Macrotrends, "China and India Infant Mortality Rate 1950–2023" accessed March 14, 2023, https://www.macrotrends.net.

FIGURE 6. OUT-OF-POCKET EXPENDITURE FOR HEALTHCARE IN INDIA AND CHINA



Source: Knoema, "China—Out of Pocket Expenditure as a Share of Current Health Expenditure," accessed March 14, 2023, https://knoema.com.

market forces in the healthcare sector and strengthened the public-sector share of healthcare in the country.

In India, by contrast, since the 1991 economic reforms, the government has promoted the loosening of regulations and the implementation of liberal policies and has continued to encourage privatization, even in the healthcare sector. Though liberalization of the healthcare sector has given rise to challenges—such as high OOPE, shortage of skilled doctors and nurses, and lack of infrastructure[33]—the opening up of the economy has brought high-quality healthcare facilities, cutting-edge technology, various insurance schemes, and foreign investment in the sector, among other benefits.

Both countries have managed to lower their MMR and IMR. The OOPE has reduced as well, but it still makes up a significant chunk of total health expenditure per capita. Insurance policies, government schemes, and caps on and regulation of the prices of pharmaceuticals have reduced OOPE. Nevertheless, healthcare still remains unaffordable for many consumers.

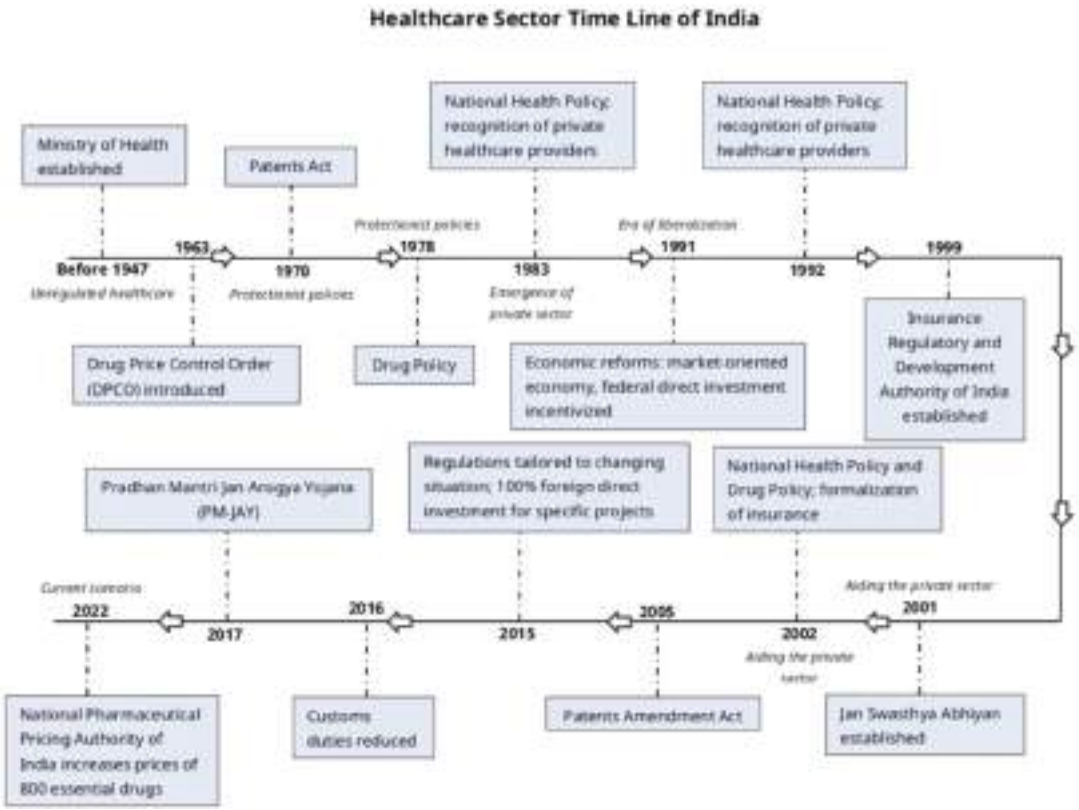
33. Ashvini Danigond, "5 Reasons Why India's Healthcare System Is Struggling," *Hindu Businessline*, May 28, 2021.

CONCLUSION

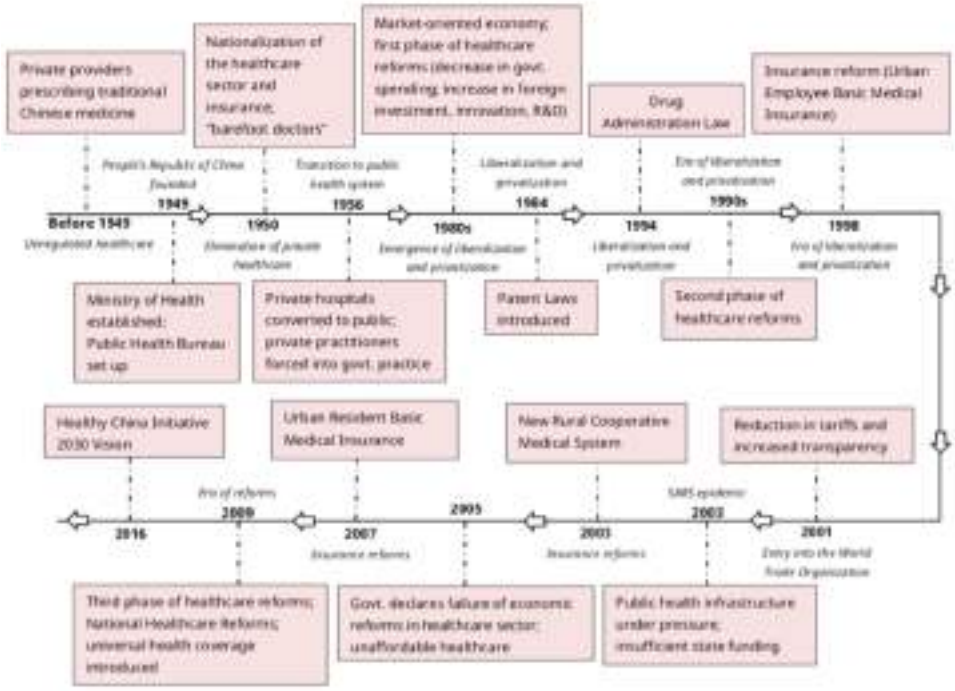
An overview of the evolution of the healthcare systems in China and India reveals some similarities but also striking differences. Both countries have come a long way in increasing life expectancy, eradicating several diseases, and reducing the MMR, the IMR, and OOPE, but they also have a long way to go. Both countries are home to robust healthcare systems, but the processes that have led to their growth have been entirely different. Policies that were introduced with similar goals presented very different results in two completely different environments.

China and India consitute nearly two-fifths of the world's population. Therefore, the progress and setbacks they face are closely observed by the world. The decisions they have made in the past few decades, along with the effectiveness of the policies and laws they have adopted, affect the lives of people outside the countries themselves.

Both countries need further restructuring of certain fields within the healthcare sector. First, healthcare financing must reduce OOPE on medical care costs for individual patients. Though OOPE has reduced, it continues to remain



Healthcare Sector Time Line of China



high. Second, the countries must increase access for people in rural and remote areas. Third, they must build capacity and infrastructure to address and monitor health emergencies. Finally, they should focus on a more holistic approach to improving quality of life, living standards, hygiene, and nutrition.

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