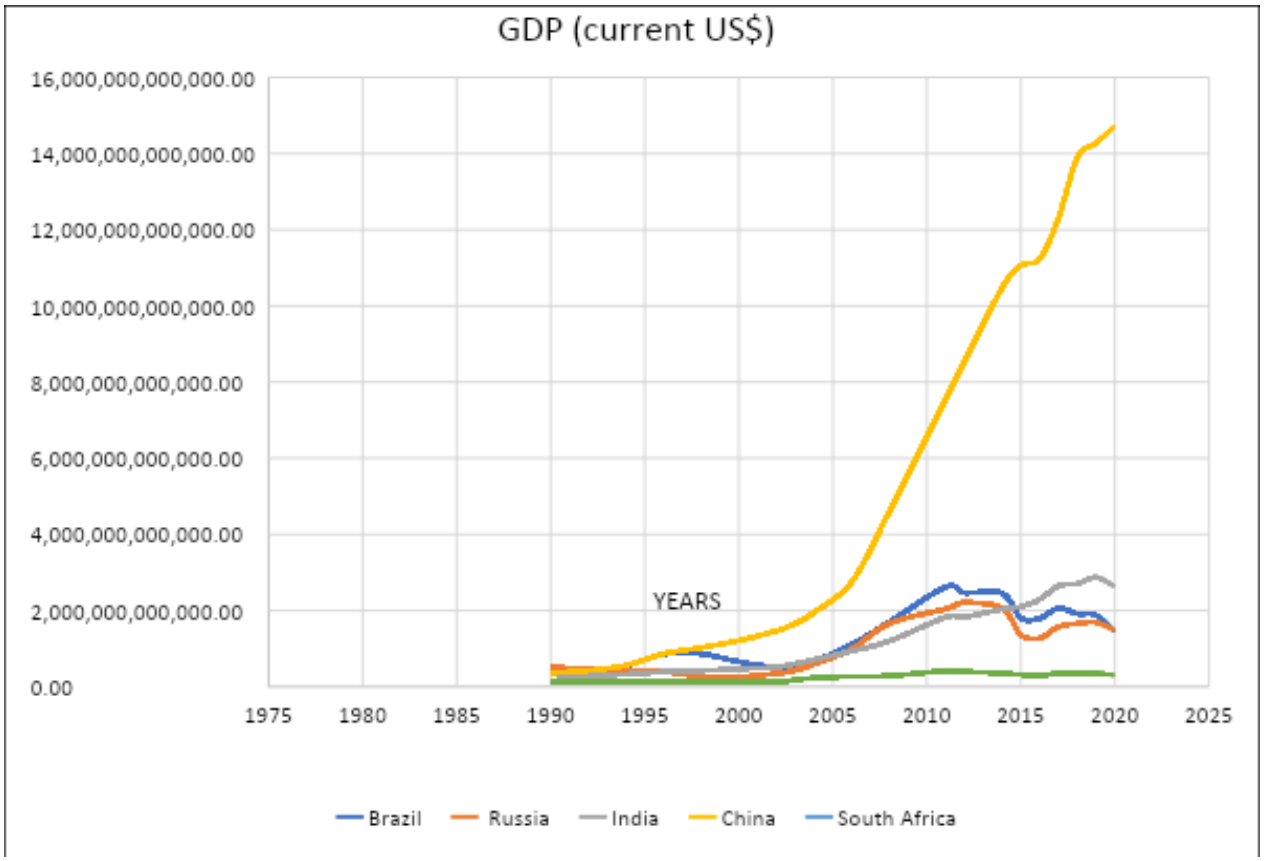
GDP (CURRENT YEAR PRICES):

GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars.

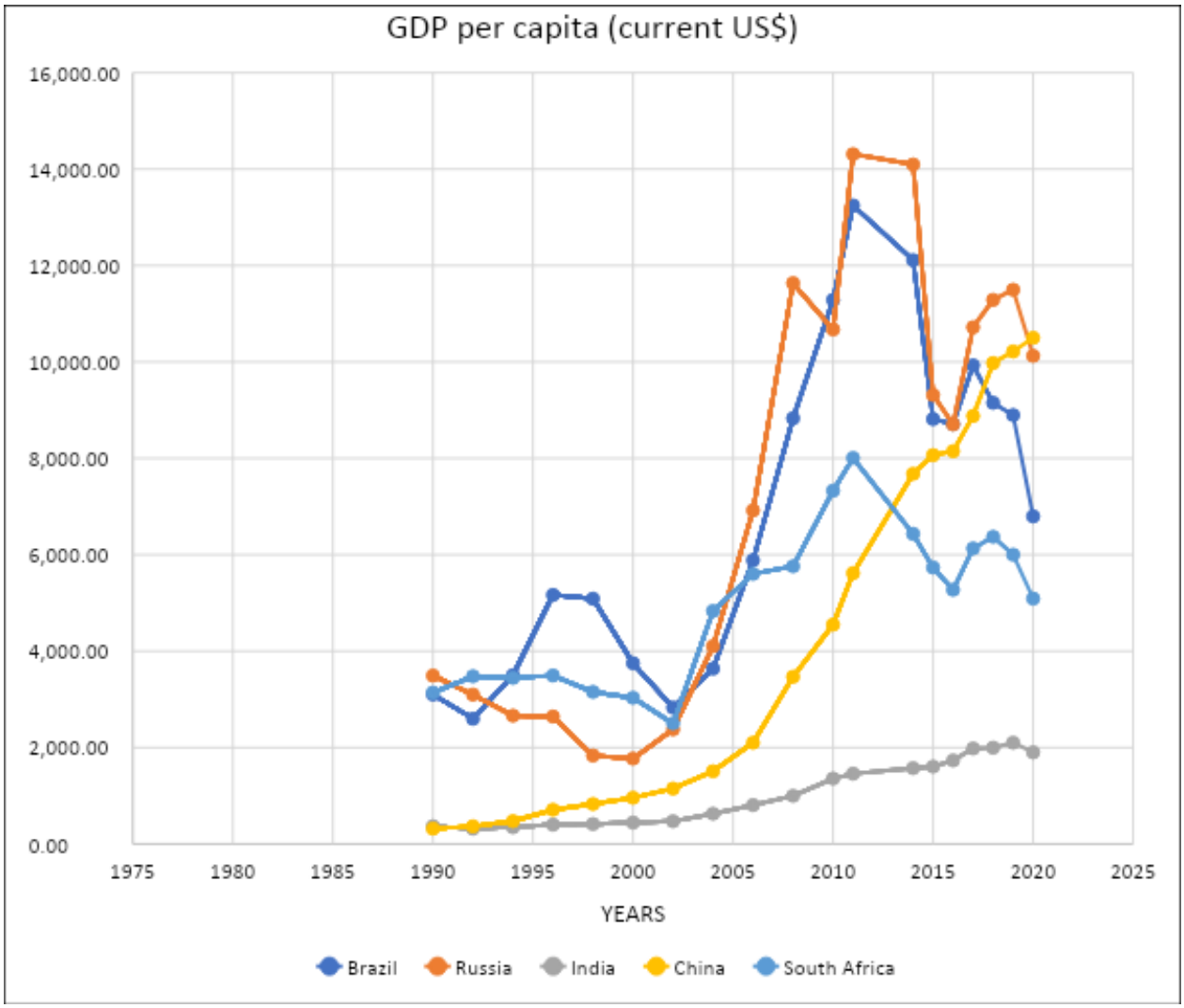


In absolute terms, China has by far the largest economy.

GDP per capita (Current US$):

GDP per capita is gross domestic product divided by midyear population. It breaks down a country's economic output per person.

GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.



- According to WB data mapping the per capita GDP of countries from 1990-2020, all these nations have steadily grown richer. However, in per capita terms, India is the poorest and has the lowest per capita GDP among all the BRICS countries.
- Each of these countries saw rise in their GDP annually, in particular China, whose GDP increased by roughly 6 times since 2003.
- The BRICS countries have been experiencing an economic boom over the past several years and therefore have seen significant gains in the production of goods and services. Unemployment rates have also been correspondingly low in these countries, with the exception of India.
- The Indian economy is larger than Brazil and South Africa. This is mostly because of India's population which is estimated at 1.34 billion in 2021, is significantly larger than Brazil and South Africa. Measured on a per capita basis, however, Brazil is far rich. Yearly income earned by an individual in India is the lowest when compared with people living in the BRICS (Brazil, Russia

India, China, South Africa) nations. In India, close to 25 per cent of the people had full-time employment between 2008 and 2012, which is low compared with BRICS peers.

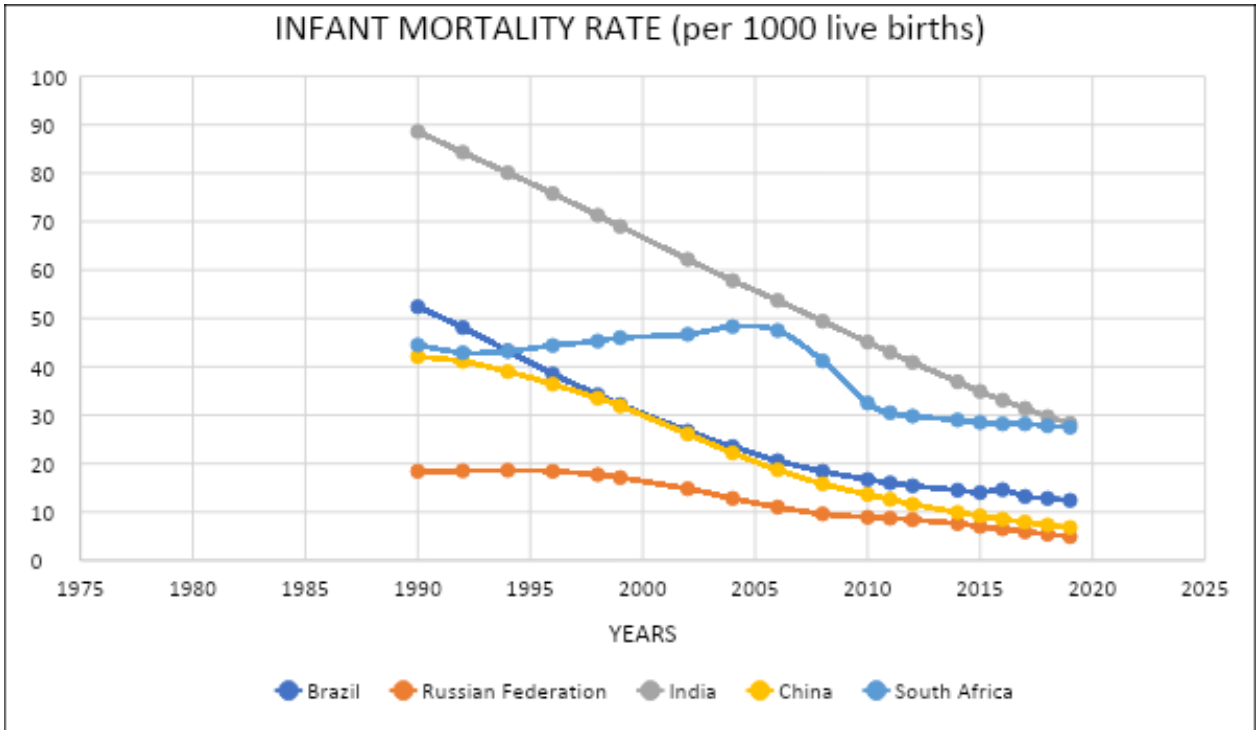
The HDI was created to show that human development cannot be measured by economic growth alone. Therefore, in line with these principles, the rest of this article will analyze the performance of BRICS nations in healthcare and education.

Let us start with healthcare:

HEALTHCARE INDICATORS

Indicator 1: Infant Mortality Rate (IMR)

The infant mortality rate is the number of deaths of children under one year of age per 1,000 live births. This rate is an important key indicator for a country's health and standard of living; a low infant mortality rate indicates a high standard of healthcare.

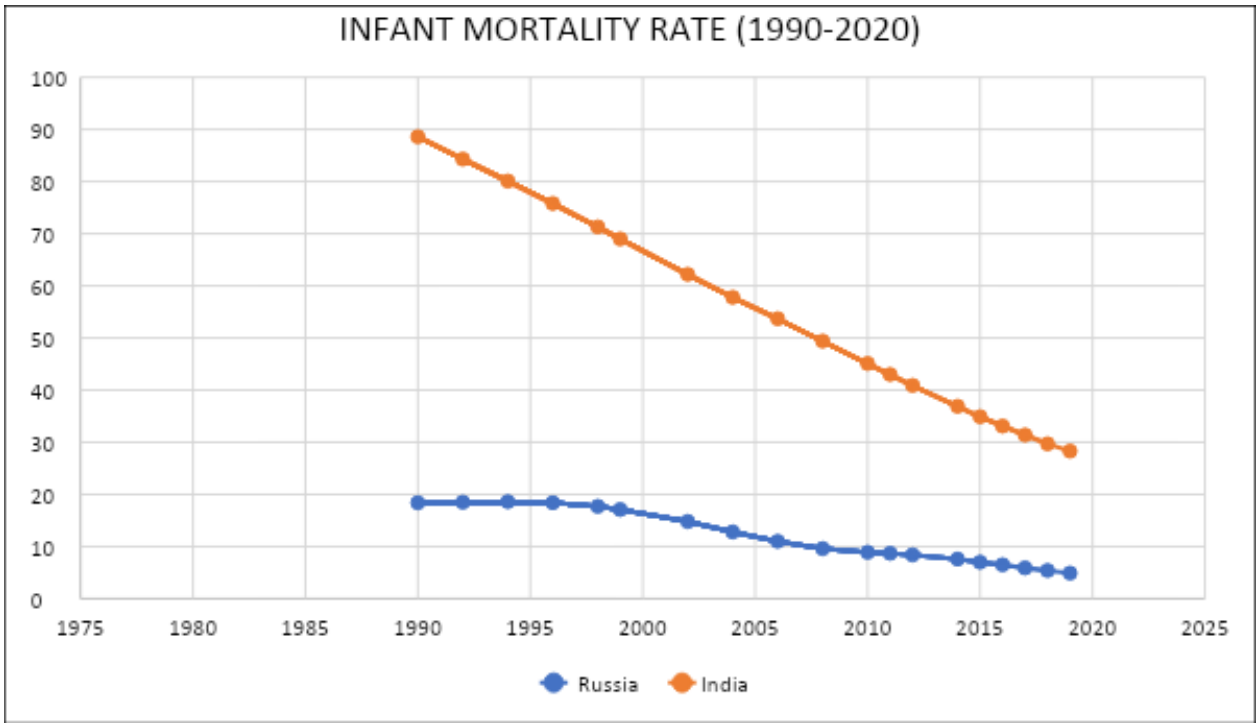


Analysis:

- The infant mortality rate has fell substantially over the study period in all five countries. In Brazil and China, the magnitude of subnational income-related inequalities in infant mortality, both absolute and relative, also decreased substantially.

- Russia has the lowest infant mortality rate since 1990-2020, and has decreased the infant mortality rate from 18.4 to 4.9. Russia is also among the countries with the lowest infant mortality rates. Children's healthcare development of is one of the subsections of the national project Healthcare.
- Between 1960 and 2015, Brazil's IMR reduced by 92%, compared to a 76% reduction in India. China's IMR reduced 92% between 1969 and 2015, compared to 73% over the same period in India.
- India is at the bottom among the BRICS nations when it comes to infant mortality rate. India has one of the highest infant mortalities in the world at 721,000, which is 1975 deaths daily on average. Good governance and adequately trained healthcare staff can together reduce neonatal deaths by an average of 24%.

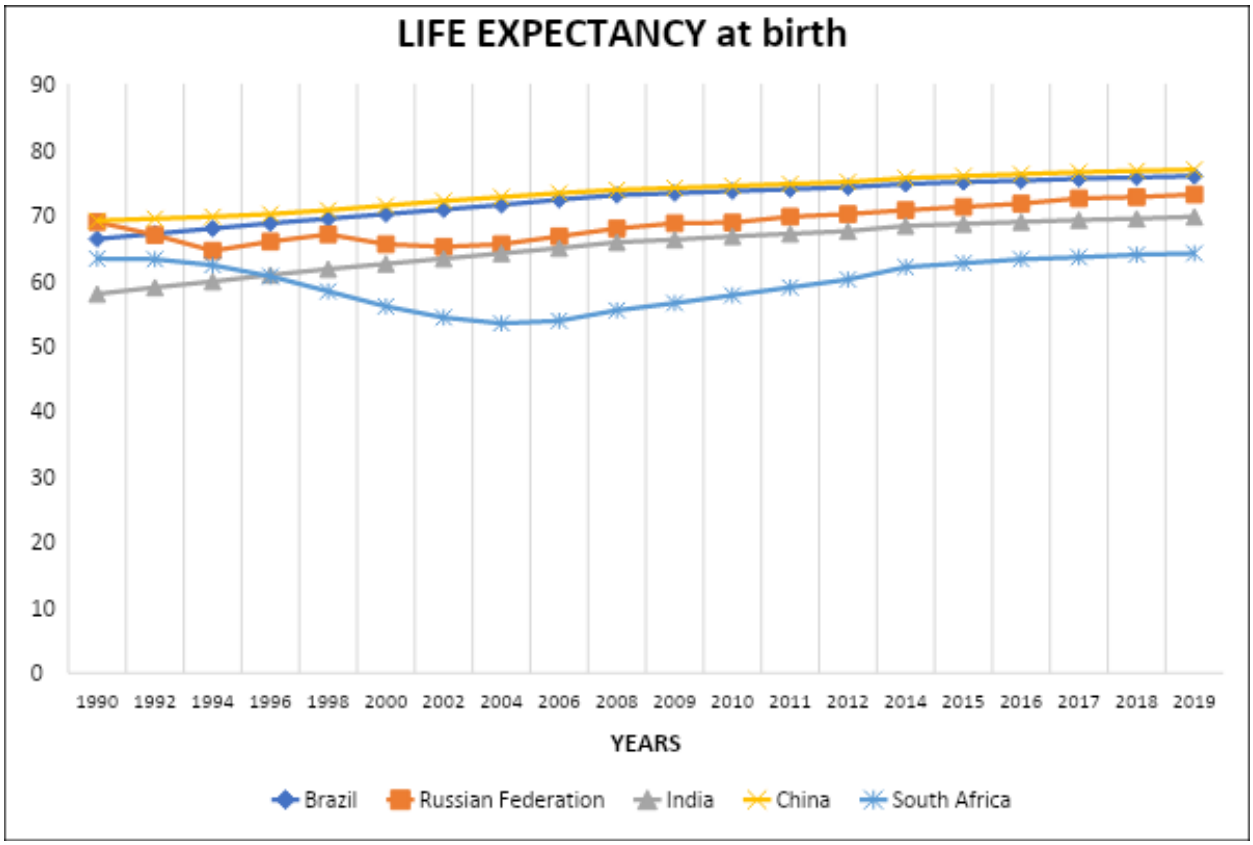
Let's now compare India with the best performing BRICS country i.e., Russia.



- The IMR of India has been very high approximately 88.6 since 1990 as compared to that of Russia's IMR which was 18.4 in 1990.
- Although there has been a substantial decline in IMR of India, the numbers of deaths are still very high as compared to Russia.
- The numbers are high due to lack of facilities at primary health centers, such as doctors, beds, clean water, bathrooms, and even shortage of transport to urban hospitals where specialized care can be given to the infants. The majority of these deaths (58%) are neonates- newborns younger than 28 days. 60% of primary health centers in India do not have a stabilization unit for newborns, and these centers have a shortage of specialist doctors from 75% to 95%.

Indicator 2: Life Expectancy at birth

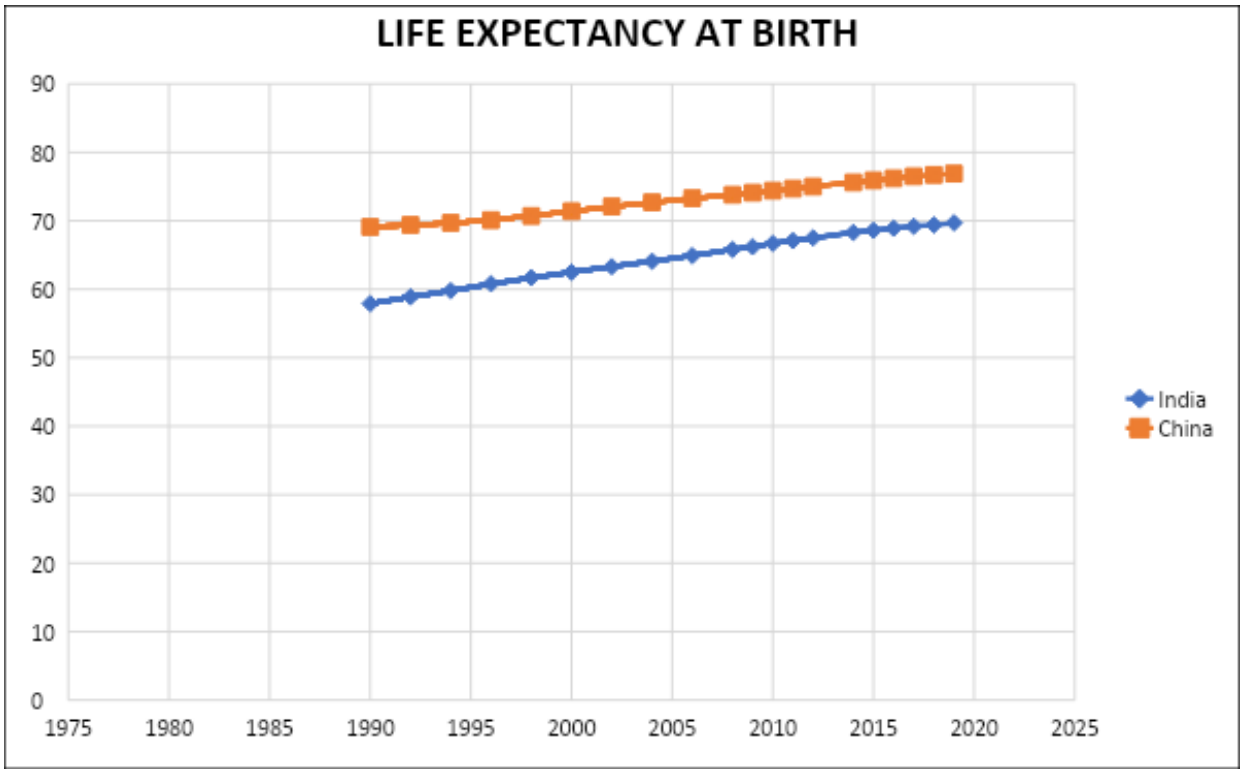
Life expectancy at birth is the best-known measure of population health status, and is often used to gauge a country's health development. It measures how long, on average, a newborn infant can expect to live if current death rates do not change. Since the factors affecting life expectancy often change slowly, variations are best assessed over long periods.



Analysis:

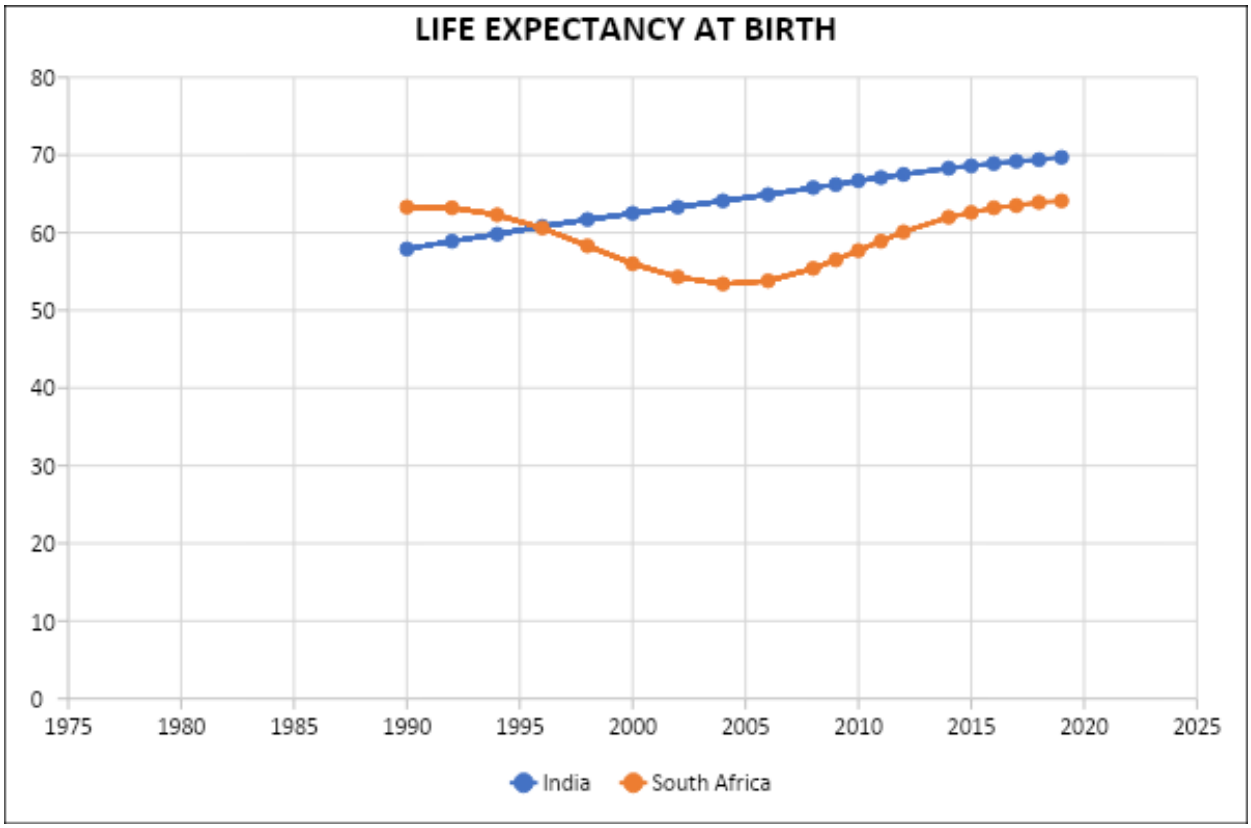
- According to the WB database, China has the highest life expectancy at birth while South Africa has the lowest among the BRICS nations. Average life expectancy in BRICS stands a fraction below the global mean, though it varies from 62.9 in South Africa to 76.1 in China.
- Steady increases in life expectancy since 1960 in Brazil, India and Russia can be seen. This has been mainly due to the following reasons-
  1) Well-targeted public health campaigns that reduced infant and child mortality and communicable disease.
  2) Improved economic conditions impacting nutrition, education and distribution of health services.
- Life expectancy gains from the 1960s onwards in South Africa were largely lost during the 1990s but it has increased annually since 2005, however, fluctuation and stagnation has meant the Russian Federation has gained less than five years in life expectancy since 1960.

Let’s now compare India with the best performing BRICS country i.e., China



- India lags behind China on several key health indicators. Differential rates of mortality decline during 1960-2009 have led to a widening health gap between China and India.
- In 2009, life expectancy was nine years longer in China than in India (74 versus 65 years). For both India and China, life expectancy increased substantially during the past 5 decades. Life expectancy at birth in India increased from 42 years in 1960 to 65 years in 2009, while life expectancy in China increased from 47 years in 1960 to 74 years in 2009. Although the rate of increase in life expectancy was similar for the two countries, the absolute increases in life expectancy were larger for China.
- During 1960-2009, life expectancy increased annually by 0.55 years in China and by 0.47 years in India.
- India’s less favorable health profile compared to China is largely attributable to its higher rates of mortality from communicable diseases and maternal and perinatal conditions. Further health gains can be achieved by reducing social inequality, greater investments in human development and health services, and by prevention and control of chronic-disease risks such as hypertension, smoking, obesity, and physical inactivity.

Let's now compare India with the lowest performing BRICS country i.e., South Africa

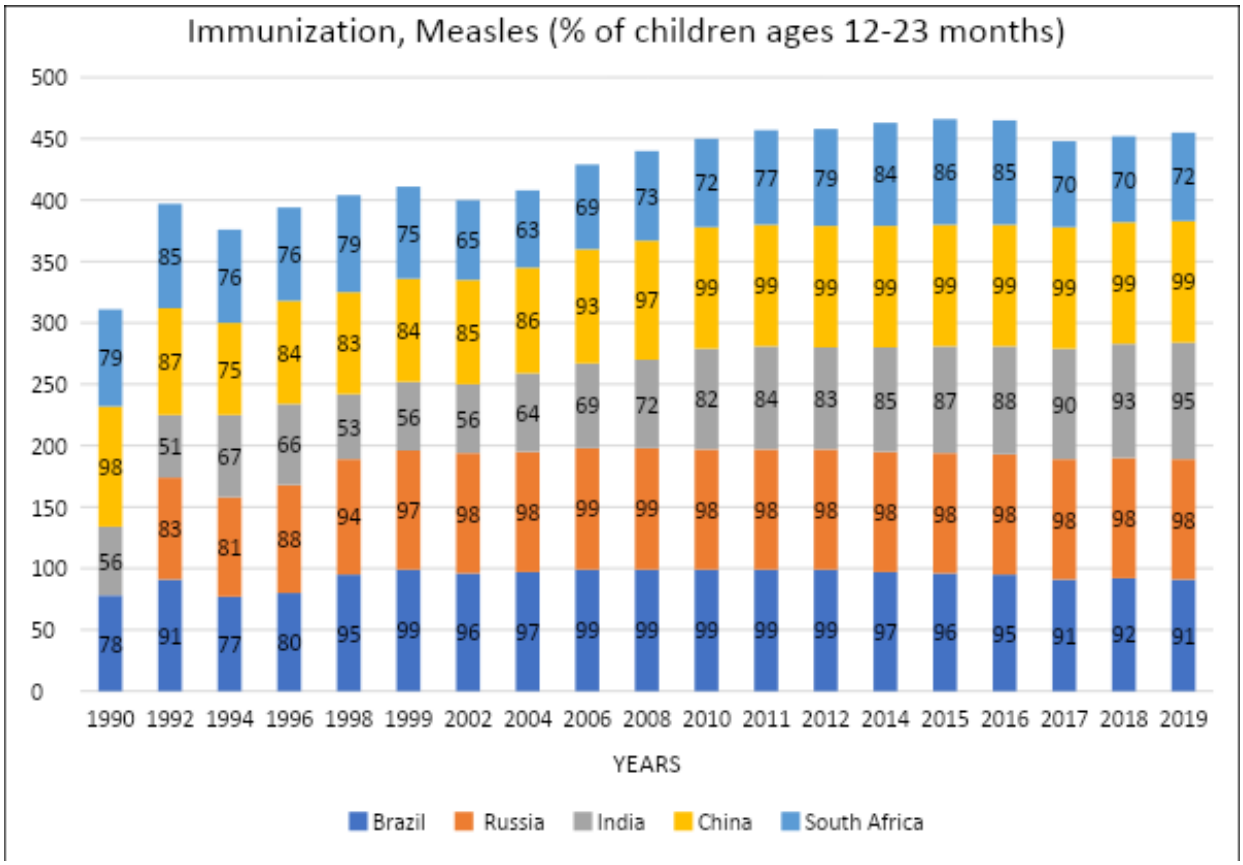


- During the 1990s life expectancy at birth was higher in South Africa as compared to that in India. However, life expectancy experienced a sudden drop beginning after 1995, as the HIV/AIDS epidemic spread throughout the country, beginning in the early 1990s. As the epidemic spread through the country, life expectancy would fall by almost 10 years, bottoming out below 54 years in 2005. Life expectancy would begin to rise again beginning in the early 2010s.
- India on the other hand has seen a gradual increase in the life expectancy at birth from 57.9 in 1990s to 69.7 years in 2019.

Indicator 3: Immunization, Measles (% of children ages 12-23 months)

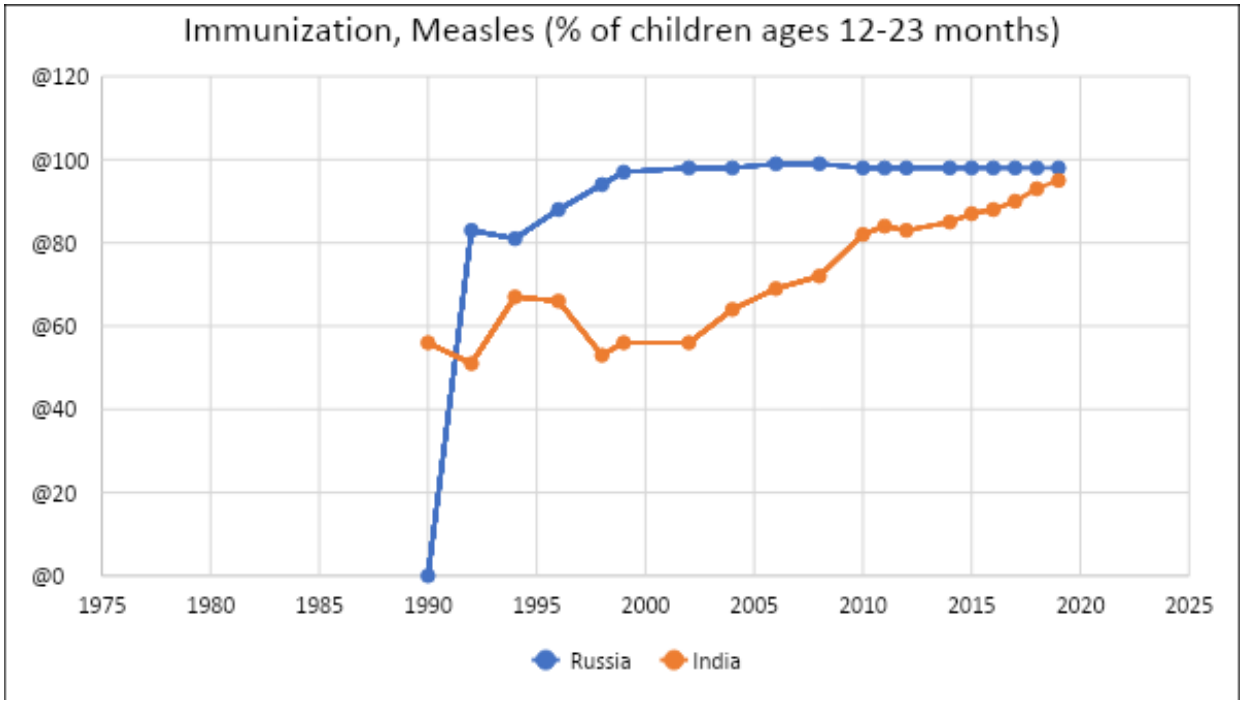
Child immunization, measles, measures the percentage of children ages 12-23 months who received the measles vaccination before 12 months or at any time before the survey. A child is considered adequately immunized against measles after receiving one dose of vaccine. Immunization is one of the most cost-effective public health interventions, and is an essential component for reducing under-five

mortality. Immunization coverage estimates are used to monitor coverage of immunization services and to guide disease eradication and elimination efforts.

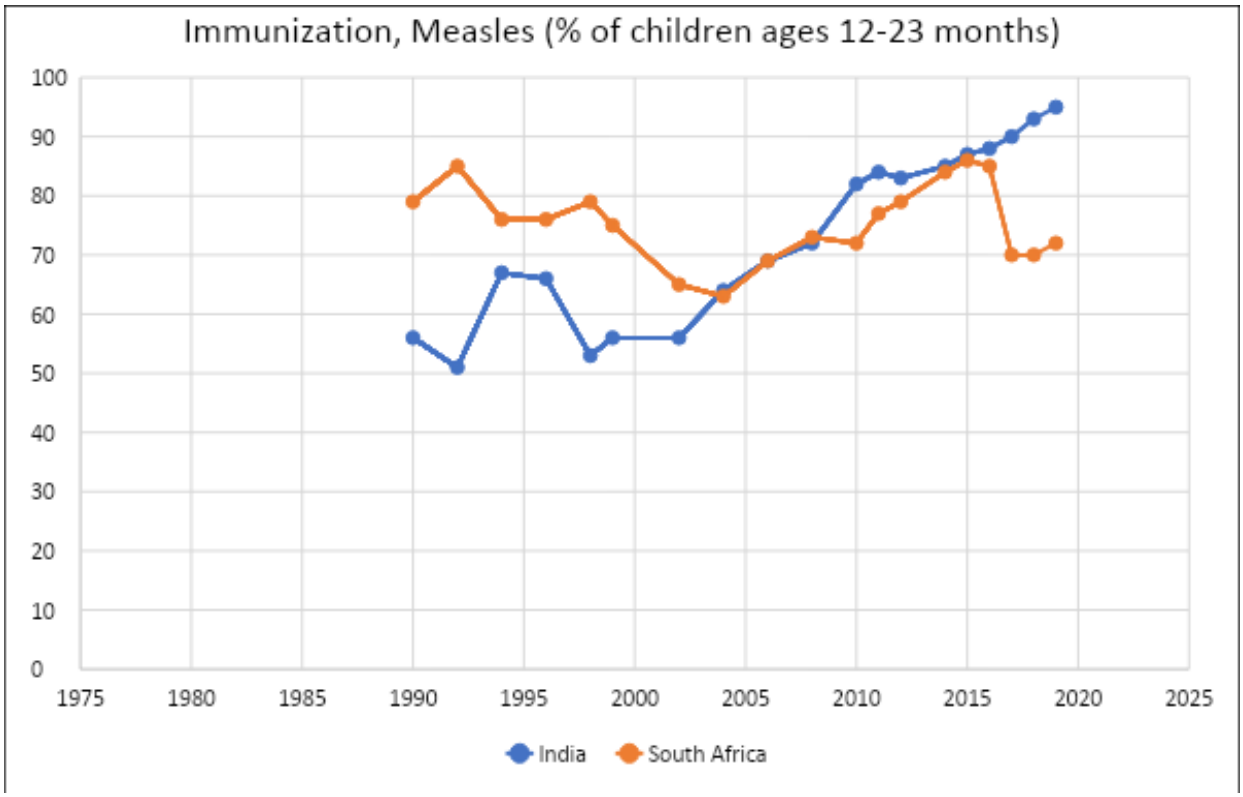


Analysis:

- The average coverage of measles among 1-year old in BRICS surpasses the global average. Vaccination coverage is above 95% for each in Brazil, China, and Russia, though varies between 69% and 76% in South Africa.
- The trends of all the countries except South Africa have been quite encouraging.
- By 2019, all the countries except South Africa had an immunization rate of over 90%.
- India has seen a substantial increase in the percentage of immunization among children from 56% in 1990s to 95% in 2019. However, China and Russia have been able to surpass India with respect to the percentage of child immunization for measles thereby achieving a target of 99% immunized children.
- Let's now compare India with the best performing BRICS country i.e., Russia

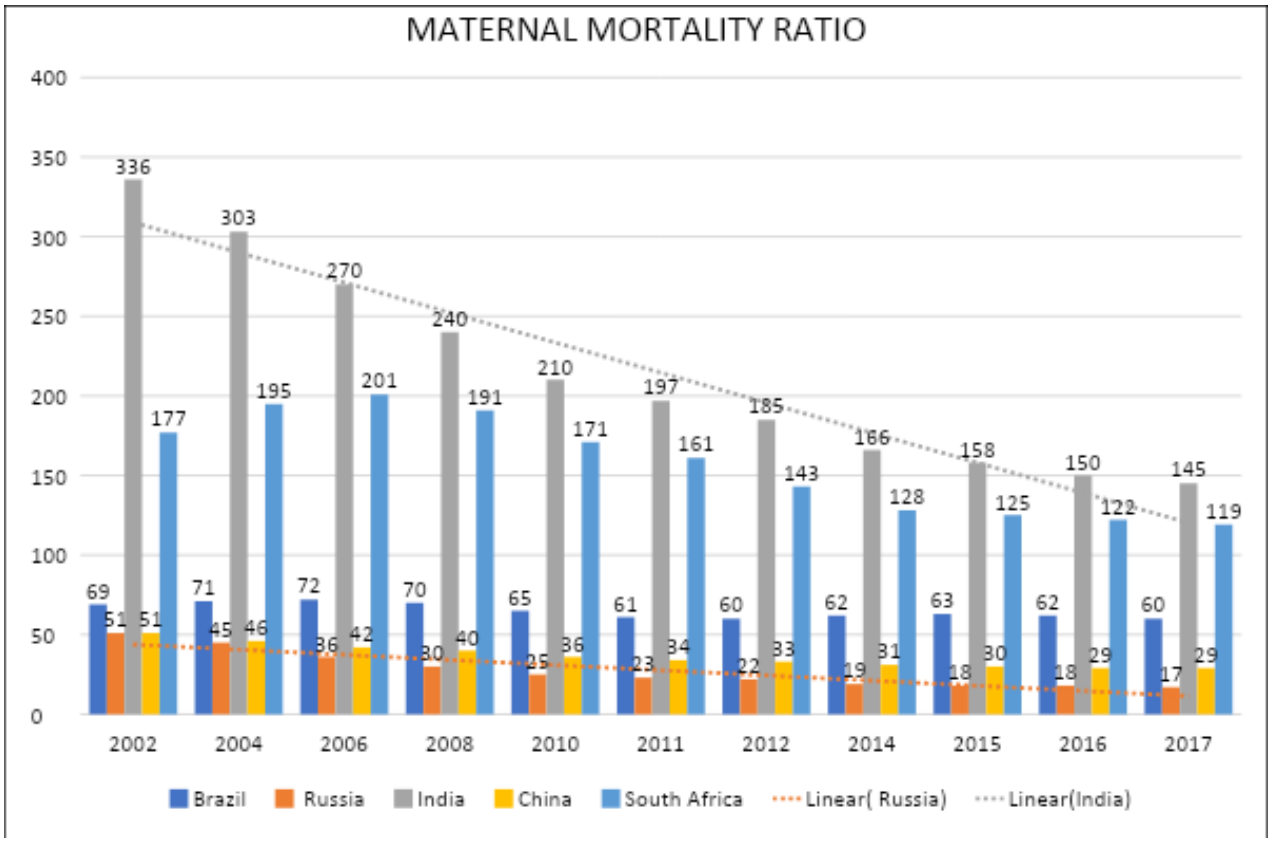


Let's now compare India with the worst performing BRICS country i.e., South Africa



Indicator 4: Maternal Mortality Ratio

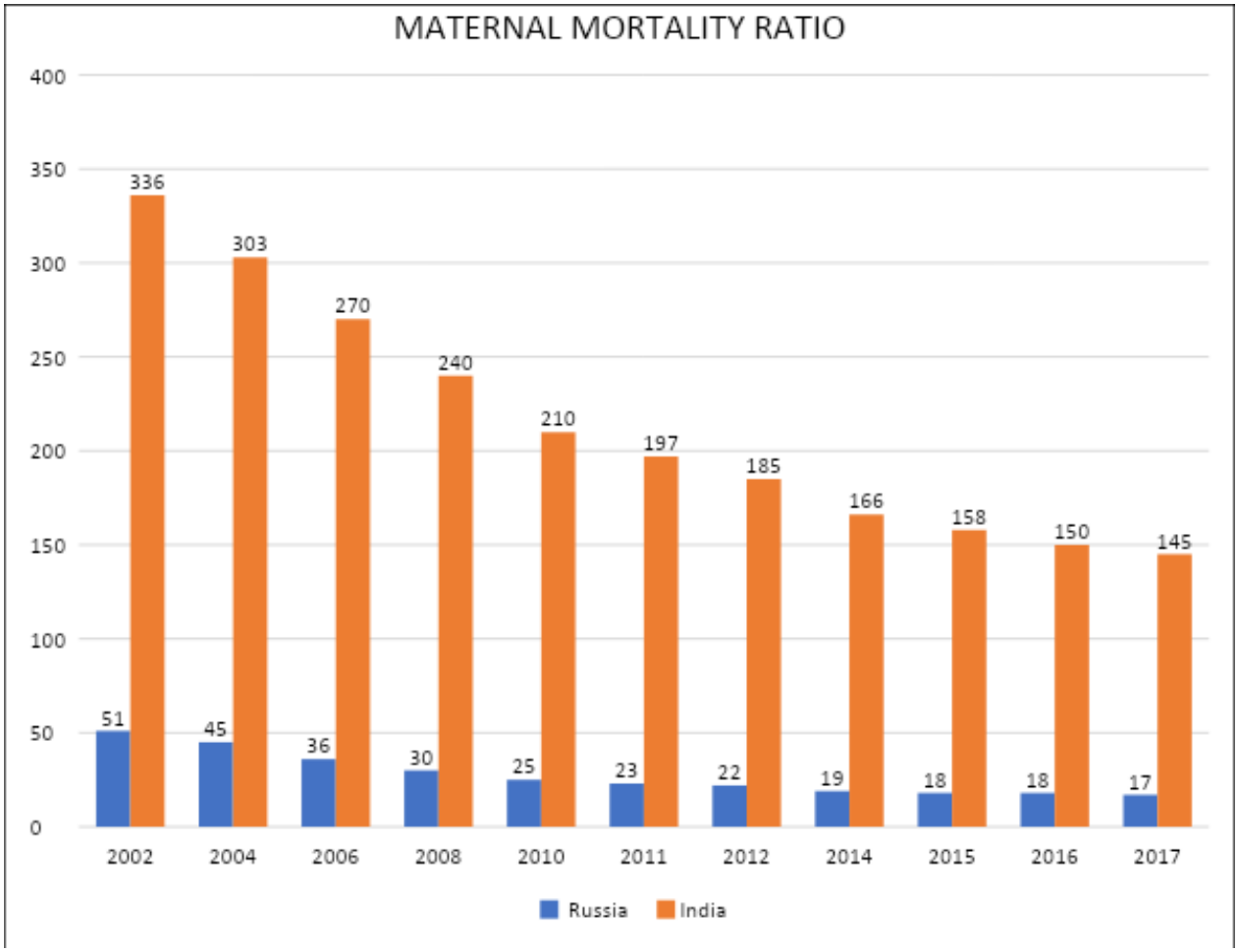
Maternal mortality ratio is the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000 live births. The data are estimated with a regression model using information on the proportion of maternal deaths among non-AIDS deaths in women ages 15-49, fertility, birth attendants, and GDP measured using purchasing power parities (PPPs).



Analysis:

- The overall maternal mortality rate (MMR) (per 100 000 live births) has decreased among the BRICS bloc, with China and India representing the greatest reduction at 72.2% and 68.7% respectively.
- India, again, has the highest MMR (145), at almost 7 times highest than the lowest rate of 25 seen in the Russian Federation.
- While the MMR in South Africa fell from 108 to 60 in 1996, it peaked again at 171 in 2010 during the height of the country's HIV epidemic. Since 2011 it has fallen steadily and stood at 125 in 2015.
- Maternal mortality across BRICS is in decline, and maternal mortality rates are less than half of global average.

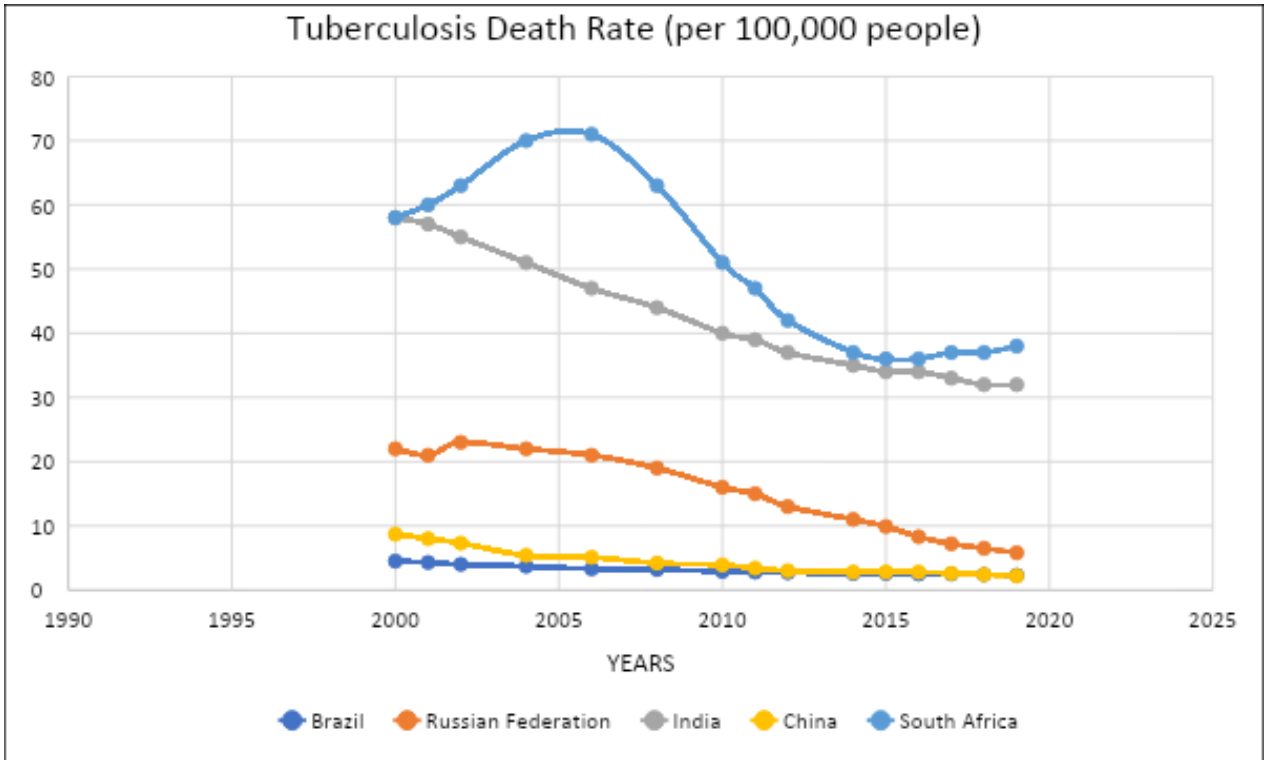
Let's now compare India with the best performing BRICS country i.e., Russia



- India has the highest MMR (145), at almost 7 times highest than the lowest rate of 25 seen in the Russian Federation.
- A huge difference can be seen between the mortality rates of Russia and India. MMR in India has not declined significantly in the past 15 years whereas MMR in Russia has come down to 17 from 51 (per 1000 deaths) which is a 66.7% change.

Indicator 5: Tuberculosis Death Rate

The tuberculosis death rate indicator refers to the estimated number of deaths due to TB in given time period. Expressed in this database as deaths per 100 000 population per year. Includes deaths from all forms of TB, and deaths from TB in people with HIV.



Analysis:

- As per the WB database, India and South Africa have recorded the highest number of tuberculosis deaths (per 100,000 people).
- Brazil, Russia, India, and South Africa currently rank 2nd to 5th and belong to 24 countries recognized by WHO with the highest burden of tuberculosis in the world. Moreover, BRICS countries have the largest number of cases of drug-resistant tuberculosis.

- Poverty alleviation programs and free access to health care have helped Brazil keep MDR TB levels relatively low and focus on delivery system innovations such as community-based TB and MDR TB care.

- China has been able to maintain lowest levels of TB deaths among the BRICS countries. Major health care system reforms undertaken in China include reducing the cost of MDR TB treatment for patients and improving the national TB surveillance system to provide individual patients with care as early as possible while generating data to facilitate the management of the disease from a population-based perspective. Opportunities for the future include applying China's strong

scientific research capability to better understand the burden of disease and contribute to the development of new drugs to treat MDR TB.

SUMMARY

BRICS countries are distinguished by their large, and in some cases rapidly growing economies. In 2015, BRICS had an average GDP per capita of US $6596, up from US $2086 in 1990.

The total expenditure on health as a percentage of GDP is lower in each of the BRICS countries than the global average (9.94%), and ranges from 4.69% in India to 8.8% in South Africa, with an average of 6.88%. Annual per capita health expenditure differs widely, from US $75 in India to US$947 in Brazil with an average of US $581, just over half of the global figure.

- In Brazil, of the total health expenditure, public health expenditure amounts close to half (46%) of which, the central government make up 45%, leaving the rest to state and local authorities. As per the assessment of World Bank, one of many great achievements of Brazil in health is bringing together different systems of health financing and service provision into one large public funded system covering the entire population, with efforts from all the tiers of government.

- In Russia Federation, the constitution of the country provides its entire citizen with right to free healthcare since early 1990s. The public health expenditure in Russia is more than half (52%) of the country's overall expenditure on health. Russia has been leading among the BRICS countries and has maintained the lowest IMR, highest immunization rate for Measles, lowest MMR and a low TB death rate.

- When compared to any other BRICS Nation, India's public expenditure on health remains lowest at a little over 1%. The highlight of Indian healthcare system is the catastrophic OOP expenditure for health that stands at 69%. India has shown the worst performance when it comes to MMR and Tuberculosis death rate.
  Efforts to widen health coverage have been few and far between. The notable programs that set towards wider healthcare coverage include National Health Mission (NHM) and Rashtriya Swasthya Bima Yojana (RSBY). Although, reports suggest that these programs have not improved the health situation of the country.

- The public health expenditure in China stands highest among BRICS nations at 55%, with private contributing the rest. Presently, China's healthcare system functions in a three-tier system; namely, at national, provincial, and county levels. Another important step taken towards achievement of UHC includes increasing the public health spending by twice. This has largely helped them to increase the strength of their public service as well as reducing OOP.

- Public health spending in South Africa is marginally less than private health spending at 47%. To improve the scenario, the government brought many reforms such as in 2008, with the Ten Point Plan. This was to guide government health policy and identify opportunities for coordinated

public and private health sector efforts, in order to improve access to affordable, quality health care in South Africa.

WHAT CAN INDIA LEARN?

India has a lot of takeaways and valuable insights from how the other countries tried to improve their health, especially in the case of Russia and Brazil. The first and key difference is that all these countries barring India have a national document enlisting and describing their vision towards UHC.

1. **INCREASED HEALTH FINANCING:** While both Brazil and China have made tremendous progress towards health coverage and reforms, the path these two countries took are different. Brazil's progress, as described before, was gradual and incremental while China took a path of fast-paced approach. This may be largely attributed to the overachievement of the Chinese economy as a whole. If India is to achieve more health coverage for its people, it may have to choose the path taken by China and immediately prioritize the spending on health. But the latter approach also has its benefits such as gradual and incremental change won't bring about distress due to sudden and abrupt change. There are few key factors that need to be looked into while moving forward in approach taken.

2. **STRENGTHENING THE PRIMARY LEVEL:** Strengthening the primary level of care with adequate personnel and equipment is one of the foremost steps towards achieving better population health. Brazil and China have been able to do so as described above. Even Russia is another example, although there is start difference between privileged and others. They have been able to provide a fair minimum care to their population. India should either concentrate on a UHC program or invest in its primary care.

3. **DECENTRALIZATION:** Another important factor that emerges from the analysis above is the degree of decentralization. Each of the BRICS nations has its very own federal structure. As such, much of the health care delivery happens through this these levels of federal structures. In China, the financial decentralization has meant many health care delivery facilities relying on the financial strengths of their local bodies. In South Africa, the decentralization coupled with poor and rich areas has led to inequalities in care. Russia has varied human resource availability across regions that has led to financial allocation being uneven. Brazil on the other hand has minimal issues compared to above mentioned countries and is the one India should follow while articulating its own visions and objectives towards financing of health in the context of a federal structure.

4. **PUBLIC PRIVATE PARTNERSHIP:** This is an area requiring much attention. Each of the countries has their own share of private sector contribution towards health [Table/Fig-5], but nothing compared to the state of affairs in India. In Brazil, the private sector contributes within the ambit of National Health Services. In China, the government has encouraged private partnerships, with private hospitals even being eligible to provide reimbursable treatment for patients funded through social health insurance of the country [43]. India will have to analyze the effects of

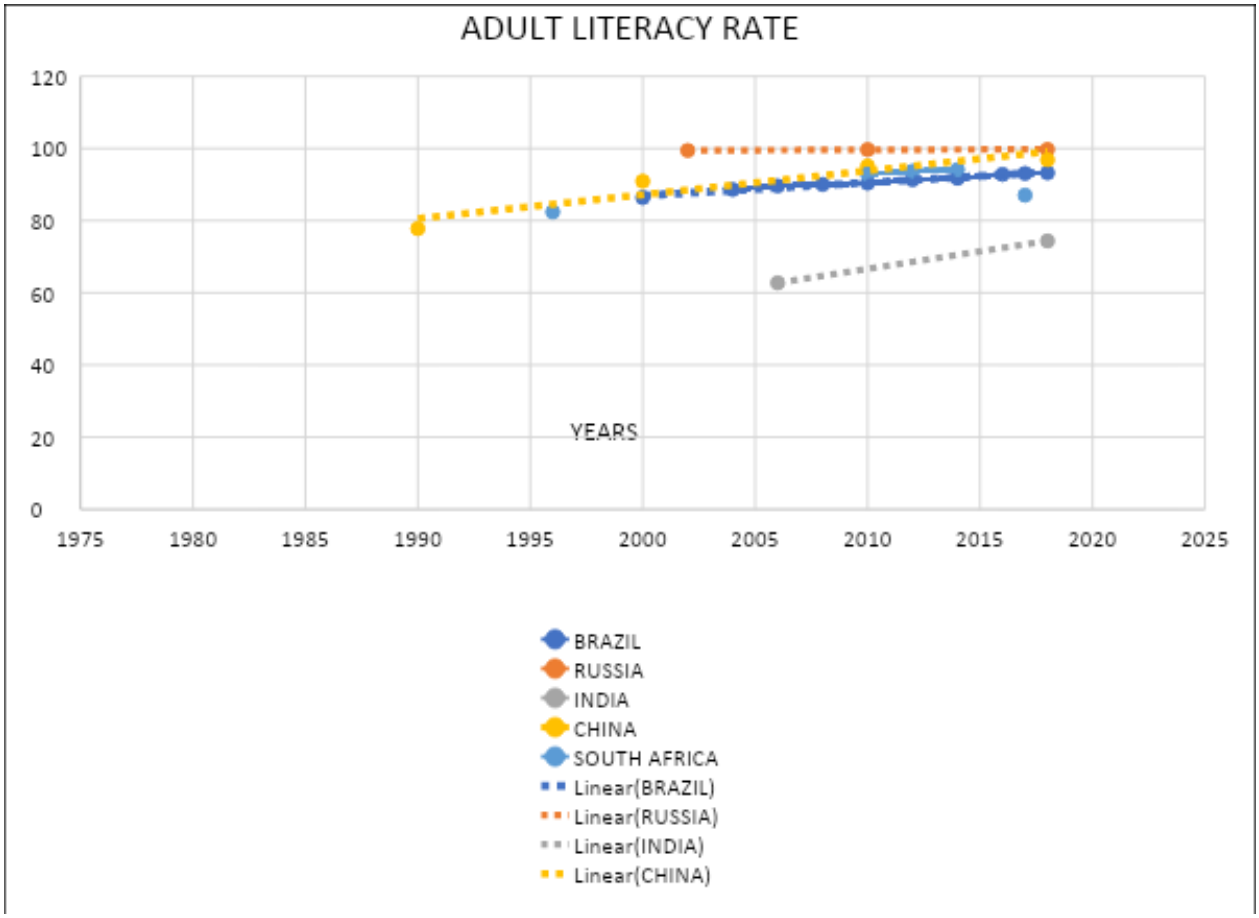
partnership with private sector on its people and compare it with other countries and move forward in a way that improves the healthcare scenario of the country.

EDUCATION INDICATORS

Indicator 1: Adult Literacy Rate

Adult literacy rate is the percentage of people ages 15 and above who can both read and write with understanding a short simple statement about their everyday life.

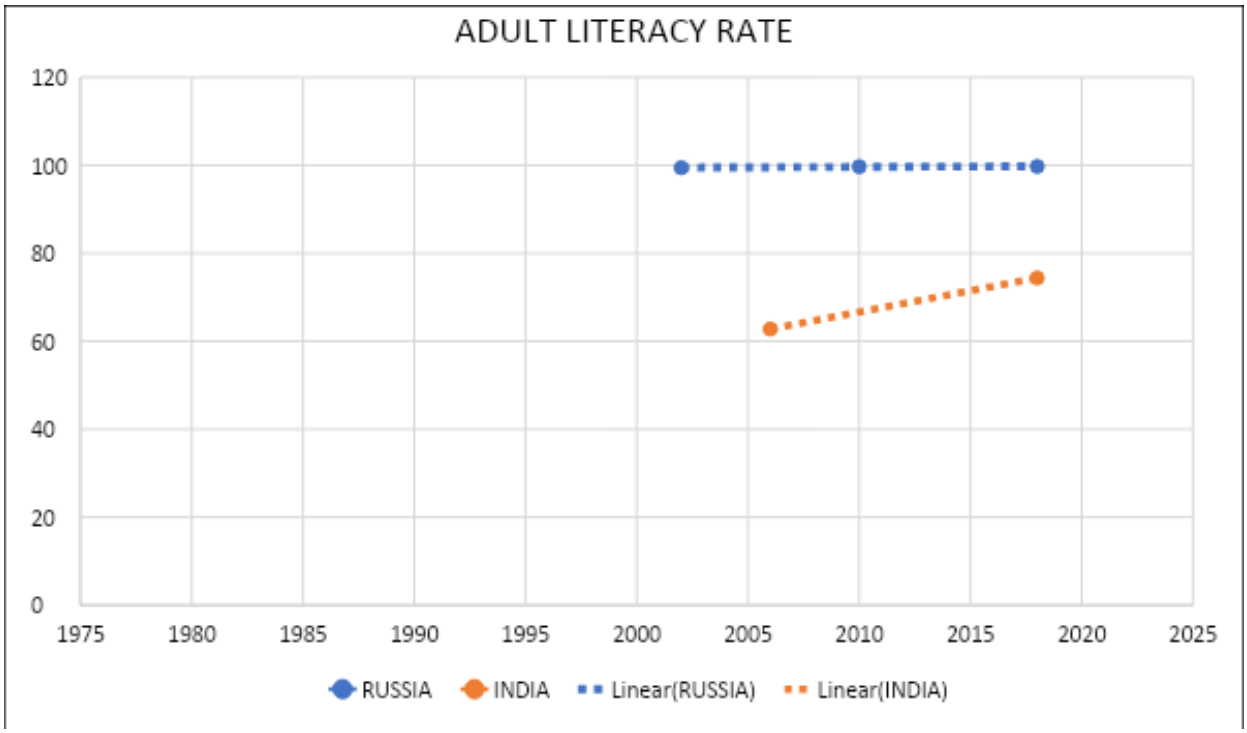
Literacy rate is an outcome indicator to evaluate educational attainment. This data can predict the quality of future labor force and can be used in ensuring policies for life skills for men and women. It can be also used as a proxy instrument to see the effectiveness of education system; a high literacy rate suggests the capacity of an education system to provide a large population with opportunities to acquire literacy skills.



Analysis:

- Graphs make it clear that Adult Literacy Rates (for total population and female population) in BRICS countries (except India) are higher than the world average.

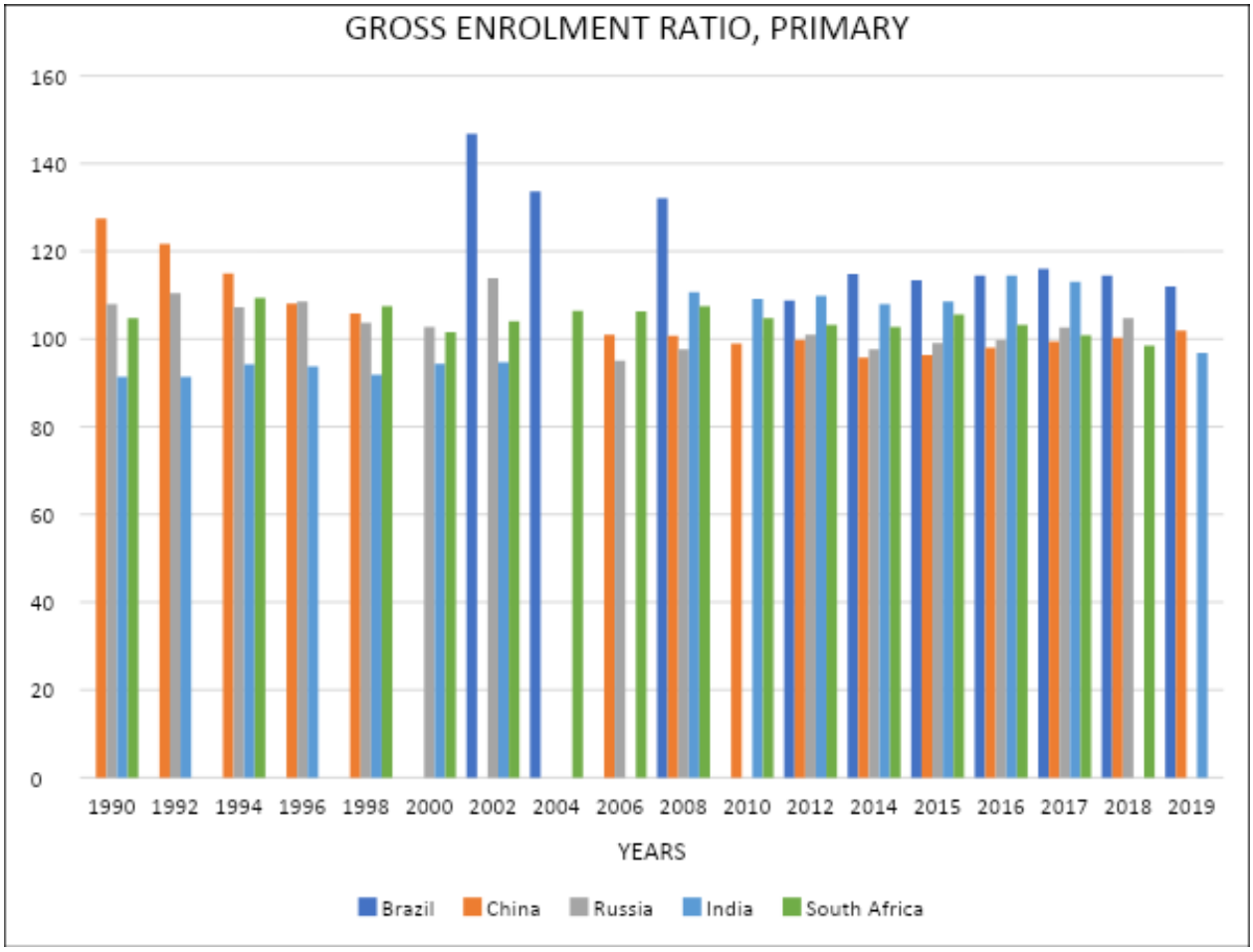
- Latest data puts India's adult literacy rate at 73.2 percent. While the country has made significant progress in improving literacy over the years, it continues to be home to 313 million illiterate people; 59 percent of them are women.
- Russia has the highest adult literacy rate out of all the BRICS countries.
- Let's now compare India with the best performing BRICS country i.e., Russia



- India has an adult literacy rate of 62.5 where as Russia has an adult literacy rate of 99.5 which is approximately 59% more than India.
- This shows that mandatory education laws are more stringent in Russia as compared to that of India.

Indicator 2: Gross Enrolment Ratio, Primary

Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

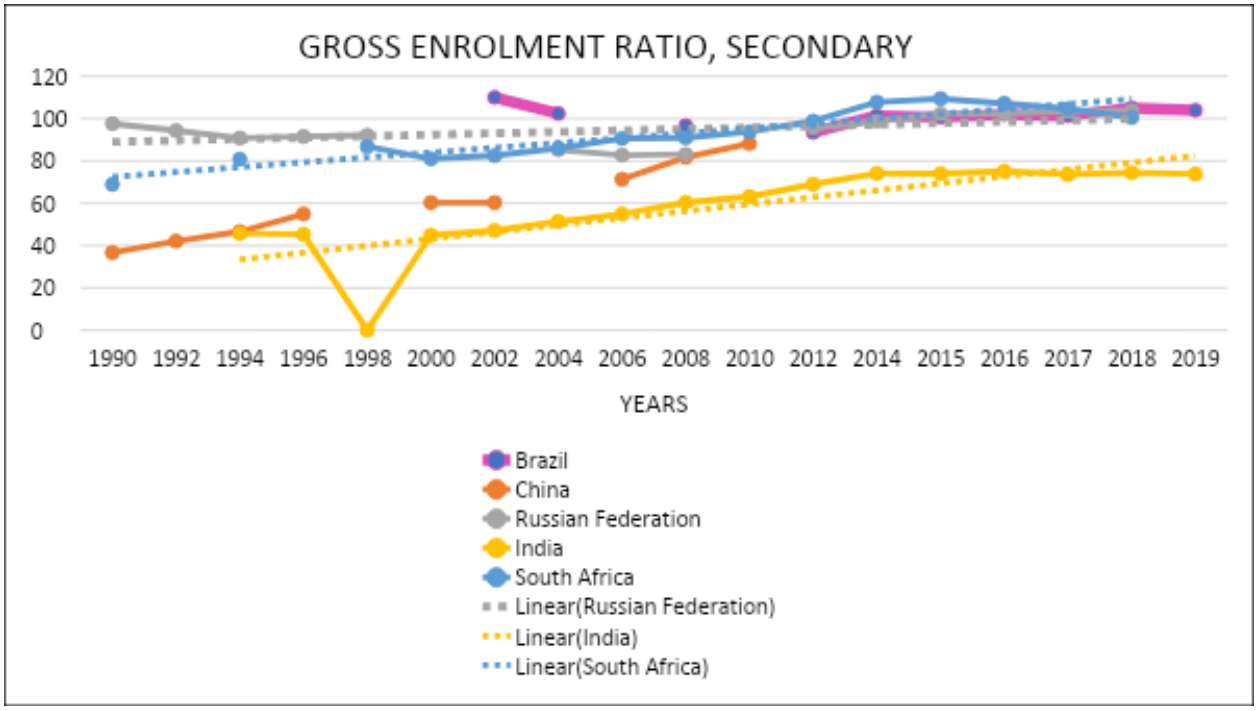


Analysis:

- The increase in the number of children enrolled in primary education in all the BRICS countries, from 1999 to 2013, is impressive.
- Maximum enrolment rate in primary education can be seen in Brazil i.e., 112 in 2019 which is the highest as compared to other BRICS nations. In 2015, gross enrolment ratio in primary education for Brazil was 115.3 %. Though Brazil gross enrolment ratio in primary education fluctuated substantially in recent years, it tended to decrease through 2004 - 2015 period ending at 115.3 % in 2015.
- In the 1990s China saw a consistent increase in the gross enrolment ratio whereas India during its early years saw comparatively lower enrolment ratio i.e., 91.4. However, this trend can be seen changing after 2010. A gradual decrease can be seen in China's enrolment ratio.
- The value for School enrollment, primary (% gross) in Russia was 102.58 as of 2017. Over the past 46 years this indicator reached a maximum value of 121.05 in 2003 and a minimum value of 95.00 in 2006.

Indicator 3: Gross Enrolment Ratio, Secondary

Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.

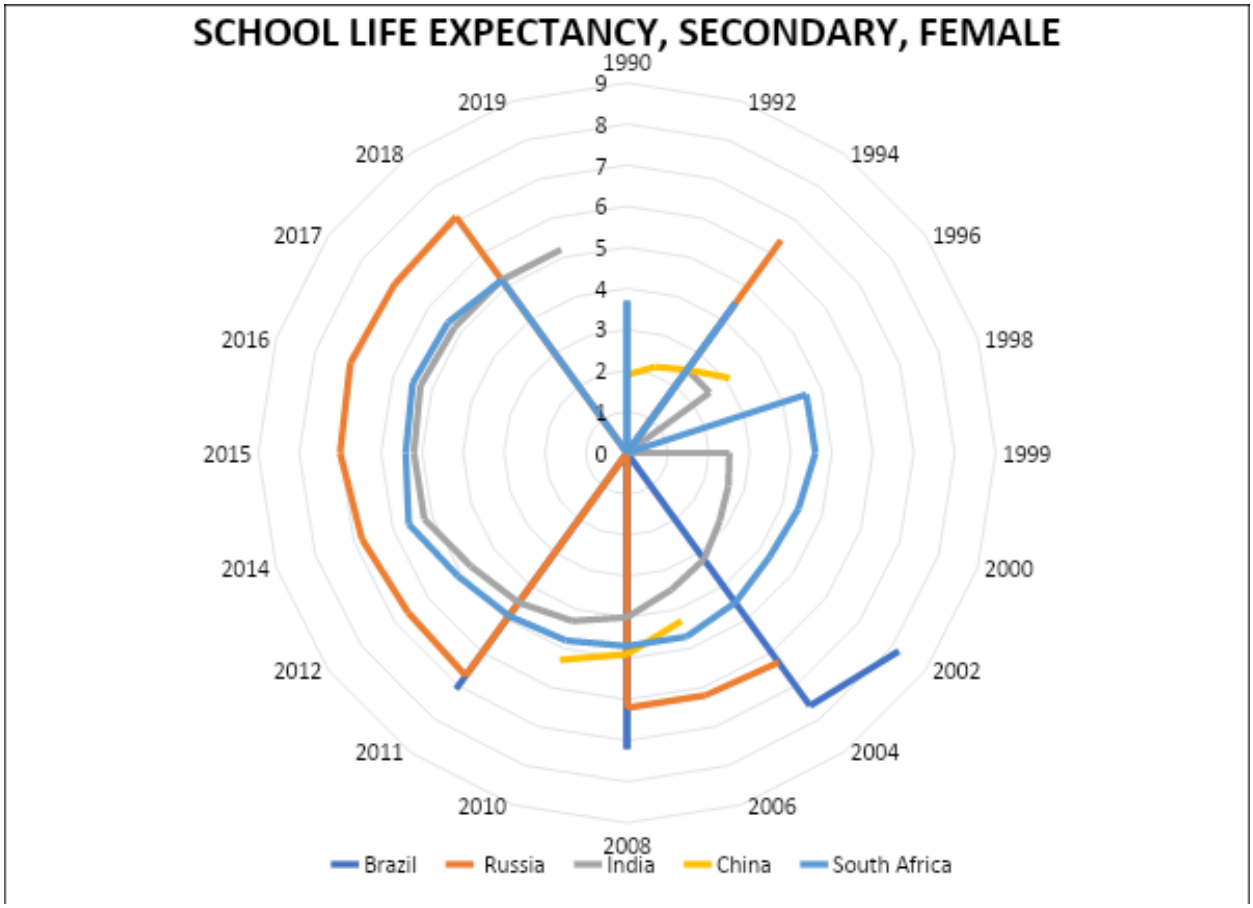


Analysis:

- BRICS have made major strides in secondary education.
- The number of secondary school students shot up by 42.7 million in India and 13.5 million in China. At upper secondary level gross enrolment ratios vary from 55% in India to 98% in Russia.
- Out of all the BRICS nations, India has the lowest gross enrolment ratio in the secondary education sector i.e., 78.
- As per the graph Brazil and South Africa have an upward sloping trendline which shows that there has been a consistent increase in the secondary gross enrolment ratio.

Indicator 4: School Life Expectancy, Secondary, Female

Number of years a person of school entrance age can expect to spend within the specified level of education. For a child of a certain age a, the school life expectancy is calculated as the sum of the age specific enrolment rates for the levels of education specified.



Analysis:

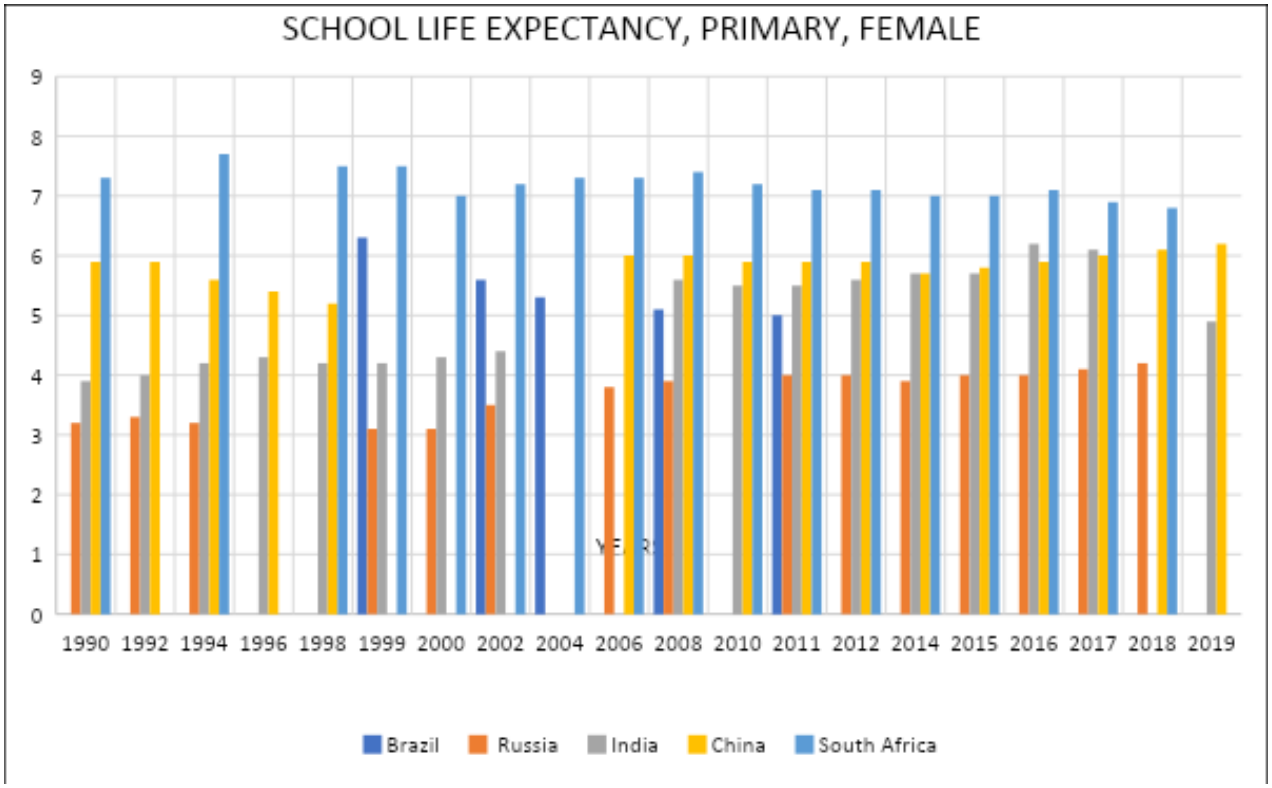
- As per the world bank database Russia has the highest school life expectancy among females as compared to the other BRICS nations.
- There has been a substantial increase in the school life expectancy of females in secondary education in India. It has increased from 2.5 years in 1996 to 5.2 years in 2019.
- South Africa and India have seen a similar trend in the increase in school life expectancy of females.

Let’s now compare India with the best performing BRICS country i.e., Russia

- From the beginning years, there has been a huge gap between the school life expectancy among females in India and Russia.
- In 1994 school life expectancy was 6.4 years in Russia among females while it was 2.5 years in India. Therefore, Russia was 3 times ahead than India.
- However, over the years this gap has been reduced with increase in government programs in India that are promoting girl child education. Due to this, school life expectancy was 5.2 years in 2018 in India. Although it was still less than that of Russia’s.

Indicator 5: School Life Expectancy, Primary, Female

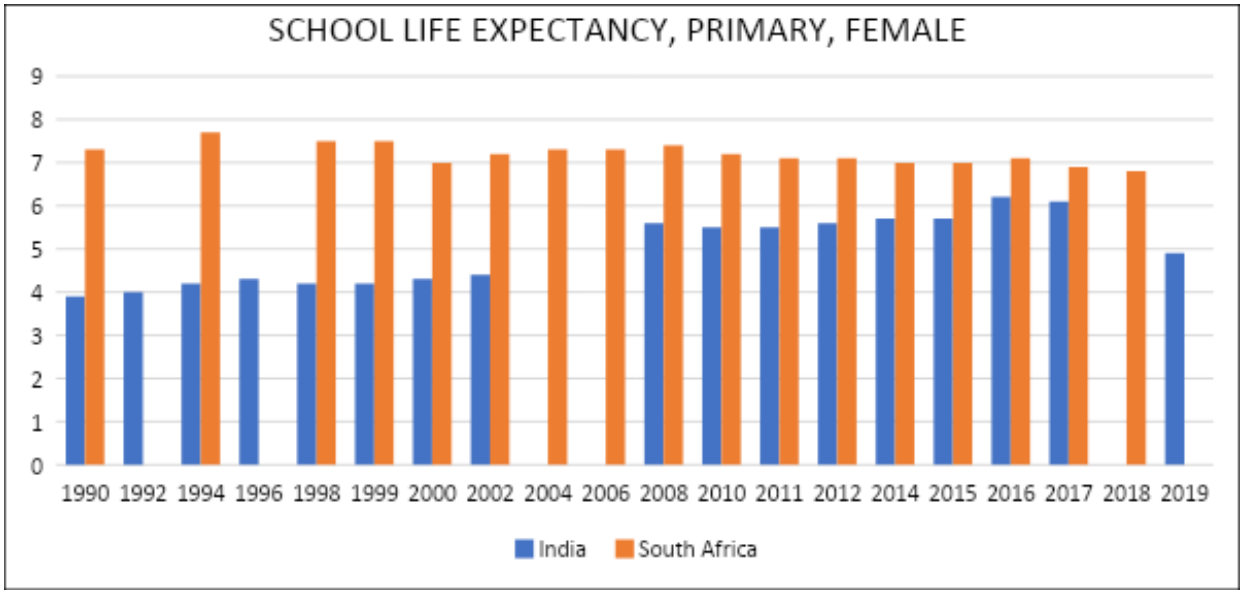
Number of years a person of school entrance age can expect to spend within the specified level of education. For a child of a certain age a, the school life expectancy is calculated as the sum of the age specific enrolment rates for the levels of education specified. A relatively high SLE indicates greater probability for children to spend more years in education and higher overall retention within the education system.



Analysis:

- Over the years South Africa has maintained the highest school life expectancy among females despite being a developing nation. Their school life expectancy has remained constant at 7.3 years.
- China has also seen an increase in the number of years of school life expectancy from 5.9 years in 1990 to 6.2 years in 2019.
- India and Russia saw a similar trend of increase in school life expectancy. Although the number of years is less as compared to China and South Africa.

Let’s now compare India with the best performing BRICS country i.e., South Africa.



- In 1990s the school life expectancy of South Africa (7.3 years) was more than two times than that of India (3.9 years).
- South Africa saw the highest school life expectancy of 7.7 years in 1994 after which there was a gradual decline in the school life expectancy among the female population.
- Although India has seen some improvement over the years, it is still less than South Africa as per the data of 2017.

SUMMARY

The BRICS countries (Brazil, Russia, India, China and South Africa) have emerged as a powerful cluster of developing countries and a strong economic lobby group in today's competitive global environment.

On the dimension of Education, Russia has the highest adult literacy rate of 99.7%, while India lags behind with 71.2%. Moreover, India sees the highest inequality in education among the other BRICS economies. The average number of years of school attended by women between the age group of 25-35 years is as low as 5.6 compared to Russia (13.8) and South Africa (10.4). Another major aspect which is crucial to a nation's prosperity is Tolerance and inclusion.

To ensure maintenance and consistency of economic growth, assertive education policies are crucial to these economies. The scope of the challenges to be faced is broad, from ensuring universal access to education and improving levels of literacy and numeracy, to fostering higher education and research development towards building a more sophisticated economy.

India was placed at 59th rank among 64 countries in education. According to the reports, youth unemployment increased from 10.4 percent to 23.0 percent in the last year. It is clear that our education system is not providing skills to the youth that may enable them to earn a living. This unfortunate situation exists despite considerable expenditures being made by the Union and State Governments. According to Reserve Bank of India, the governments spent 3.3 percent of GDP on education in 2019-20.

The GDP in this year was Rs 197.4 lakh crore. This works out to an expenditure of Rs 6,51,618 crore. The school-going age population is 45.9 crore. This money is being spent in paying hefty salaries to government teachers. The government is giving attractions like no fee, free books and mid-day meals to encourage students to enroll in government schools where they get sub-standard education. The government teachers fundamentally have no interest in teaching because their salaries are secure irrespective of the results of their students.

The curriculum is also "backward" looking with focus on regional languages against English; and on languages instead of mathematics and sciences. The governments must give this huge money directly to the students in the form of "education vouchers" with which they may pay the fees in a school or university of their choice.

The government should also make teaching of computers compulsory from Class 6 so that the students can be prepared for the future challenges and opportunities. In this background the New Education Policy is entirely a failure. It fails to introduce English at the primary level, and technical education at the secondary level and fails to create a carrot-and-stick policy for the teachers. Unfortunately, the education policy is being made by the same education bureaucracy that is the problem.

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