



Economic Aid to the BRIC Economies



How effective has economic aid been in the
development of the BRIC economies since the year 2000?

– Saavi Patel | Allegra Negri | Grace Kim | 2022

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Abstract

This paper aims to demonstrate the impact of foreign economic support on the growth of the BRIC economies since the 2000s. Indicators including the Gross Domestic Product (GDP), Gross National Income (GNI), Human Development Index (HDI), Life Expectancy, and Literacy Rates are used as a baseline for which to measure development. Comparing the statistics of these development indicators from 2000 to the present day, the data indicates that there have been notable advancements, with each nation improving in their development indicators, however, while correlations between these and aid received was often present, it was not possible to prove a causal link between aid received and these indicators. It is observed that in some nations, it might be challenging to locate precise statistics and data that can be used to support a claim and establish accurate correlations between the effects that aid has had on the development indicators of the BRIC economies.

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Introduction:

Traditionally, economic aid can be defined as the distribution of funds from one economic entity (the donor) to another (the recipient) in a unilateral manner (Abbott, 1970). Common forms of economic aid include direct/indirect, bilateral/multilateral, debt relief, humanitarian relief, tied/untied (Pettinger, n.d.). An example of aid can be seen in 2020 when the US government donated over \$19.7 million to assist in the mitigation of the health and socio-economic impacts of COVID-19 in 2020 (U.S. Embassy & Consulates in Brazil, 2021).

Since the turn of the millennium, economic aid has had a role in developing the four large emerging-market economies (Brazil, Russia, India, China). These were categorised to create the catchphrase “BRIC economies” by Goldman Sachs Chief Economist in in early 2000s (Armijo, 2007). They represent the countries that stand to exceed the G-6 countries in economic power and size by 2040, and were predicted by economists Wilson and Purushothaman (2007) to become “the engine of new demand growth and spending power” (Armijo, 2007).

Economic aid has had a fundamental role in fostering the efforts of highly developed countries, needed to implement the Millennium Development Goals (MDG) (WHO(World Health Organisation), 2018). These 8 goals set out by the United Nations (UN) were targeted to improve the lives of the world’s most deprived by 2015. Alongside the collaboration of 189 country leaders pledging their support, UN partnered with external organisations to including; world health organisation (WHO), UNs

WH children's funds (UNICEF), international labour organisation (ILO), the World Bank and many more (United Nations, n.d.).

This paper will seek to analyse available secondary data to do two things:

1. Establish to what extent there is a correlation between aid received and the indicators of development. *
2. Attempt to analyse the effectiveness of the support provided by economic aid to the countries chosen for this study**

*The indicators of development used for this study will include:

- Gross Domestic Product (GDP)
- Gross National Income (GNI)
- Human Development Index (HDI)
- Life Expectancy
- Literacy Rates

**The countries selected for this study are:

- Brazil



- Russia
- India
- China

This paper will assess the success of the support provided through economic aid in the form of changes in healthcare, implementation of infrastructure projects, education initiatives and the impact on the overall economy. The effectiveness of each of these factors will be analysed based on how much they have improved indicators.

After establishing the changes in the indicators of development as well as the aid received over the same time period, this paper will try to assess the success of the support provided through economic aid in the form of changes in healthcare, implementation of infrastructure projects, education initiatives and the impact on the overall economy. While there is expected to be a number of examples of how foreign aid has been spent, it is important to establish whether this spending has directly contributed to the changes noticed in the development indicators. With such an astronomical amount of money being donated to various countries each year, establishing the success and in turn, appropriateness, of this economic activity is vital.

Background of Indicators of Development:

According to the Royal Geographical Society (RGS), development indicators are a method used to measure how developed a country or region is compared with others. Economic indicators measure how developed a country may be through financial and industrial means and social indicators measure how developed a country may be through non-financial means (Royal Geographic Society, no date) There are many different indicators used to measure the extent of development.

Gross domestic product:

GDP is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period. As a broad measure of overall domestic production, it functions as a comprehensive scorecard of a given country's economic health (Fernando, 2022). This indicator provides a clear snapshot of the size of a country's economy and when compared to the same indicator at a later time frame, one can calculate the economy's growth rate.

Gross national income:

GNI is the total amount of money earned by a nation's people and business. It is used to measure and track a nation's wealth from year to year. The number includes the nation's GDP plus the income it receives from overseas sources. This is an alternative to GDP which calculates income instead of output (Investopedia, 2021).

Human development Index:

The other indicator used in this paper is the HDI statistic developed and compiled by the UN to measure various countries' levels of social and economic development. It is composed of four



principal areas of interest: mean years of schooling, expected years of schooling, life expectancy, and GNI per capita. Like the other two indexes, it is a tool used to follow changes in development levels over time and compare the development levels of different countries (Investopedia, 2022).

Literacy Rates:

Adult literacy rate is the percentage of people aged 15 and above who can both read and write with understanding a short simple statement about their everyday life (The World Bank, 2022)

Life Expectancy:

Life expectancy is defined as how long, on average, a newborn baby can expect to live, if current death rates do not change. It is one of the most frequently used health status indicators (OECD, 2022).

Background of Aid:

Foreign aid is the international transfer of capital, products, or services from one economic party to another for the benefit of the recipient's country or its citizens (Williams, 2021). To show how aid might possibly affect economic growth through a varied variety of channels, one can observe using both the classical growth theory and new growth models (Hansen & Tarp, 2000). The classical growth theory developed during the industrial revolution, the major driving causes of economic expansion were thought to be the profit reinvestments created from the economic progress of trade gains, division of labour and capital accumulation (Kenton, 2021). In contrast to neoclassical economics, the new growth theory suggests external, unregulated forces determine economic growth (Daniel, 2021). This links to Adam Smith's laissez-faire capitalism attitude (Heilbroner, 2021). Patrick Guillaumont (2019) explores the impossibility of separating altruistic intentions from the interests of donor or even recipient nations in practice, which is often observed in bilateral foreign aid (Guillaumont, 2019)

Multilateral aid:

Multilateral aid can be pooled from various contributing nations before the organisation executes the implementation of large-scale programs with no limitations on the usage of this aid (Biscaye, n.d.). A multilateral organisation is an intergovernmental body whose affiliates are countries providing funding and oversee the organisation's operations (funds for NGOs, n.d.). Some of the best-known examples of these organisations include the United Nations Development Fund (UNDP), the World Bank, World Health Organisation (WHO), World Food Programme (WFP), Asian Development Bank and the International Monetary Fund (IMF).

Bilateral aid:

Bilateral aid is transferred directly from donor to recipient countries with donor-imposed conditions on its use (Biscaye, n.d.). In comparison to multilateral channels, bilateral channels are more political in nature, their aid is frequently characterised by their goal for a political advantage (Gulrajani, 2016). However, according to some data, political bias in bilateral channels might have stimulated more adoption of multilateral channels, because of this they are seen as more reputable and trustworthy partners by aid-receiving nations than their bilateral counterpart (Gulrajani, 2016).



Background of BRICs

The focus on the emerging market economies sharply grew after conflicts involving the world's largest economies were brought to light (Psenaskaite., 2004). Emerging economies are 'low income, rapidly growing countries using economic liberalisation as their primary engine of growth' (Borker, 2012). The economic and financial potential of Brazil, Russia, India and China soon became of interest to many organisations and countries (Psenaskaite., 2004). These became quickly known as the 'BRIC economies', a term introduced by chairman of Goldman Sachs, Jim O'Neil, in the early 2000s, when predicting their global economic power in 2050 (Borker, 2012). The combined economies have a common characteristic of a large population, potential consumer market, fast economic growth and big area of land size, which attracts investors to inject into the economies. Goldman Sachs predicted that China and India are likely to emerge as dominant global suppliers of manufactured goods and services while Brazil and Russia to major in supply of raw materials. Currently BRICs are the world's four leading emerging market economies, the nominal GDP of which reached 10.67 trillion US dollars in 2010. According to the World Bank Database, between 2000 to 2008 FDIs net inflow (Balance of Payments, current US \$) grew from \$77.47 billion to \$309.16 billion representing a compounded annual growth rate of 18.88% (Ranjan & Dr. Agrawal., 2011). This article, (Ranjan & Dr. Agrawal., 2011), shows the historical growth in the BRIC countries since the 2000s by AID given by worldwide organisations for development and presents their current role in the global economy.

To what extent is there a correlation between aid received and the indicators of development?

Brazil:

Key Statistics

Population (Worldometer, n.d.):

- 2000: 174,790,340
- 2019: 211,049,527

Size of country (The World Bank , n.d.):

- 2000-2019: 8,358,140 sq.km

Total GDP¹:

- 2000: 1.19TR
- 2019: 1.82 TR

HDI²:

¹ The World Bank (The World bank, n.d.) It is measured in US\$, inflation adjusted.

² United Nations Development Program (Human Development Reports, UNDP, n.d.).



- 2000: 0.685
- 2019: 0.765

Brazil's economic state 2000's

The Brazilian economy has been the most volatile since the end of World War II. Comparative to the other BRIC countries, Brazil's average annual growth rate was 2.3% between 1980 and 2012. The low rate of investment is a contributing factor to the economy's stagnant development; nonetheless, throughout the 1990s and 2000s, the economy was sustained mostly by the overall rate of consumption (Keynes, 2003).

Challenges they faced as an economy

Due to Brazil's strong reliance on foreign financing as well as the domestic debt's inherent financial vulnerability, the Brazilian economy has become very fragile (Keynes, 2003). Brazil's economy only grew by 2.8% year on average between 1994 and 2001 due to fiscal imbalances and balance of payments deficits, which limited the country's economic expansion (Keynes, 2003).

Where they received their aid from

Even though the growth potential of Brazil is well documented, aid was still a key part of the country's financial makeup. Prior to 2000 and in the years that followed, Brazil received significant aid from the following donors (UK Parliament, 2019):

- Japan
- Norway
- Germany
 - Germany are the largest donors of official development assistance (ODA) to Brazil donating US\$1,523,680,000 between 2013 and 2017

Comparison of Changes in Indicators:

The total aid that Brazil received, shown in Figure 1, from 2000 to 2018 is US\$9.74 billion- a significant investment, designed to have a material impact on the indicators of development

GDP:

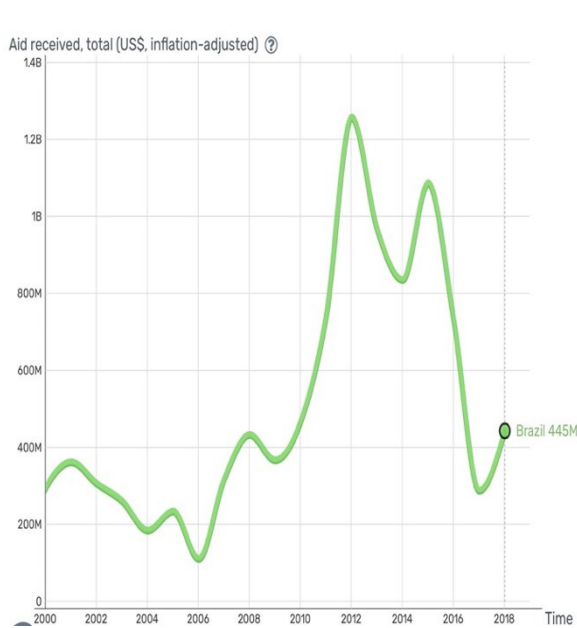


Figure 2: BRAZIL: aid received, total [US \$, inflation-adjusted]. (GapMinder, Brazil Aid Recieved, total (US\$, inflation-adjusted), 2019)

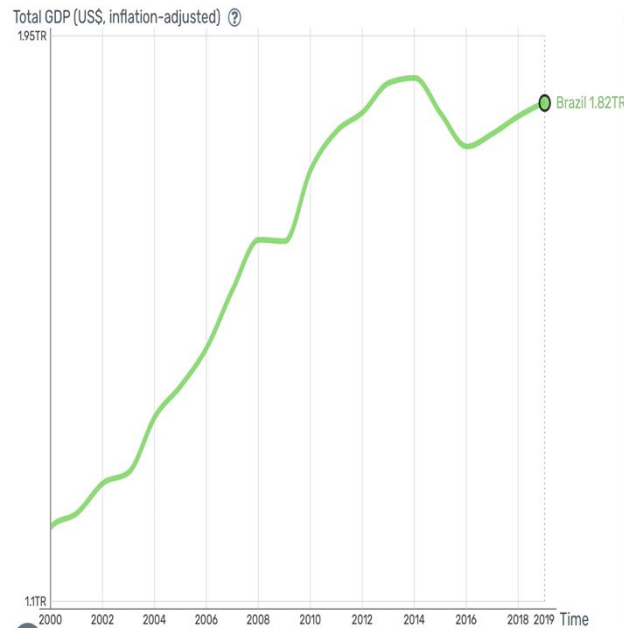


Figure 1: BRAZIL: total GDP [US \$, inflation-adjusted]. (GapMinder, Brazil Total GDP (US\$ inflation-adjusted), 2019)

Figure 1 above, shows the change in Brazilian GDP from 2000 to 2019. Over this same time period, the amount of aid given to Brazil reached a peak of about US \$1.25 billion in 2012, as can be seen in Figure 2 above. One can infer based on the data, showing large sums of aid flowing into the country, that the aid received had a positive impact on the GDP output of Brazil. There is a distinct positive correlation between these two graphs. In 2012, Brazil received over US \$1.2 billion of aid, which was a steep increase as compared to 2011, where they only received around US\$700 million worth of aid. Two years later, GDP also saw a steep increase and peaked in 2014 at roughly US \$1.8 trillion.

Looking at the two graphs, it is possible to suggest that this increase in GDP between 2012 and 2014 has been heavily impacted by the aid received as the peak for GDP came two years after the huge injection of aid. While as this stage it is unclear how long the 'lag' is between aid being received and the utilisation of this in the community, a two-year delay deems rational. Therefore, it is possible to infer that the aid received caused the increase in GDP, but further data needs to be gathered in order to confirm that aid received directly impacted GDP. This is particularly important as Brazil hosted the largest footballing competition in the world that year (The FIFA World Cup 2014) which is known to have a huge impact on economic indicators of development. The second part of this paper will seek to establish whether the correlation between aid received by Brazil and the changes in GDP are causal, partly causal or coincidental.

Furthermore, it is interesting to notice that post World Cup, GDP drops to around the level of GDP noticed in 2010, four to five years earlier. This suggests that the aid received played less of an impact because when the tournament ended, the productivity of the economy dropped. Nevertheless, the trend is still upwards which would suggest that although there are inevitable peaks and troughs, a general upward trend that shows a correlation could be causal.

GNI:

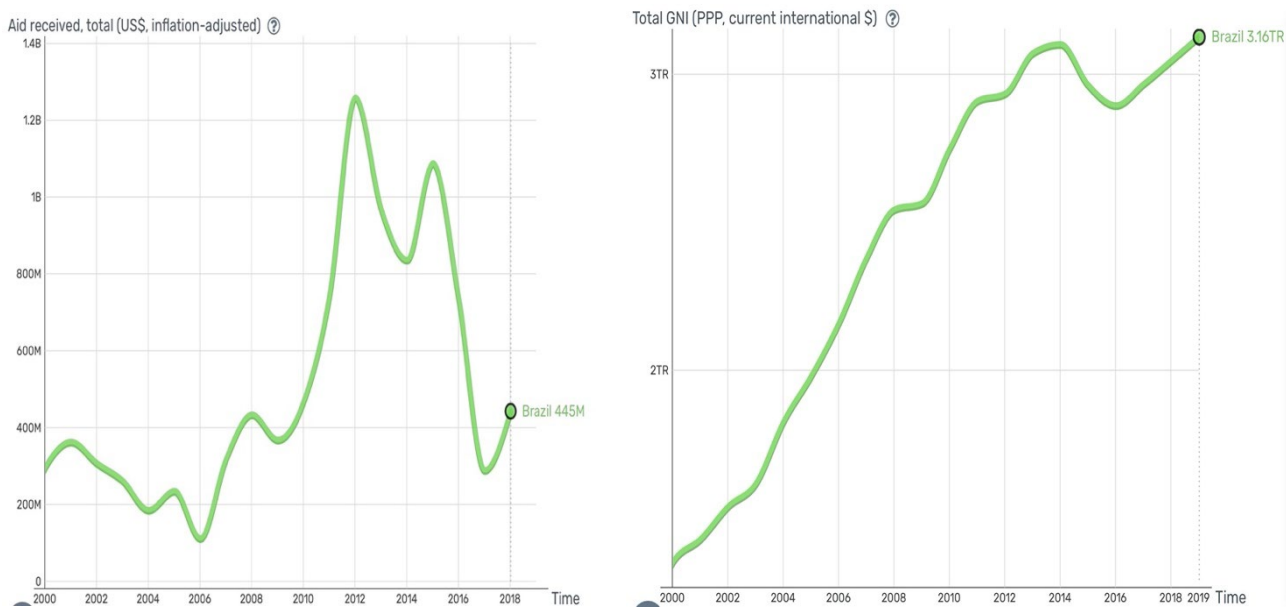


Figure 3: BRAZIL: Total GNI [PPP, current international \$].
(GapMinder, Brazil Total GNI (PPP, current international \$), 2019)

Figure 3 above shows the change in GNI from Brazil between 2000 to 2019. Over this same time period, the amount of aid given to Brazil reached a peak of about US \$1.25 billion in 2012, as can be seen in the graph alongside Figure 4. One can infer based on this data that the aid received had a positive impact on the GNI of Brazil as there is a distinct positive correlation between these two graphs. In 2012 there was a steep increase in the aid received (around US\$1.25 billion) as compared to the previous year. Over the same time period, GNI also saw a steep increase as in near 2013 it peaked to over US \$3 trillion for the first ever time.

However, despite this correlation, there is a chance that the aid received did not directly impact the GNI data. Making further reference to the FIFA World Cup of 2014, this tournament held over a short time period, attracted millions of tourists, encouraging increased spending. Therefore, an immediate injection of capital to the economy occurs in a short timeframe and might indicate why this GNI peak was noticed at that time. Despite this area of doubt, one can only comment on the available data presented and what cannot be drawn into question is the fact that there has been a positive correlation between aid received over the last 20 years and GNI. Nevertheless, further data needs to be gathered

in order to confirm this inference. As stated previously, the second part of this paper will seek to establish this.

HDI:



Figure 4: BRAZIL: Human Development Index [HDI].
(GapMinder, Brazil Human Development Index (HDI), 2019)

Figure 4 above shows the change in HDI from Brazil between 2000 to 2019. Over this same time period, the amount of aid given to Brazil reached a peak of about US \$1.25 billion in 2012, as can be seen in the graph alongside Figure 4. One can infer based on this data that the aid received had a little impact on the HDI of Brazil as there is limited correlation between these two graphs.

Though the general trend for both data sets are positively increasing, there is some doubt. In 2012, Brazil received their largest injection of aid but two years later (a viable time lag for the changes brought about by a project funded through aid to be realised), HDI did not see a large increase. From 2013 onwards, it almost completely plateaus for several years. The aid received in 2012 was seen to impact the HDI only one year after in 2013 when Brazil sees a steep increase in HDI from just over 0.73 in 2012 to over 0.75 in 2013.

However, previously it was suggested that two years would seem to resemble an appropriate time period for which to see a lag between aid received and the changes in the indicators of development. From Figure 4, one can see that the rapid HDI improvement occurs between 2012 and 2013 which is only one year's worth of lag from the injection of huge foreign aid. From 2014 to 2016, there is almost a complete plateau in HDI. This could imply that Brazil has reached the maximal level on the HDI but with countries like Norway, Finland and Germany ranking in excess of 0.90, there is definitely still room for improvement. (GapMinder, 2019) With this in mind, it could suggest that the aid received

(if it were found to contribute the changes in the indicators of development) was not utilised in a way that transformed the countries HDI and was instead utilised for more financial benefits. This was certainly suggested at the time of the FIFA World Cup of 2014 where multimillion dollar football stadiums were situated right next to slums and favelas (Davies, 2016), with some (unverified) suggestions that the Brazilian media were encouraged to take focus away from those living in poverty.

Despite this doubt, there is still an undeniable positive correlation between aid received and Brazil's HDI score. It must be remembered that even when aid is reduced, it is never cut off completely. As a result, one can only infer based on this feat at that the aid received had a positive impact on the HDI of Brazil.

Life Expectancy:

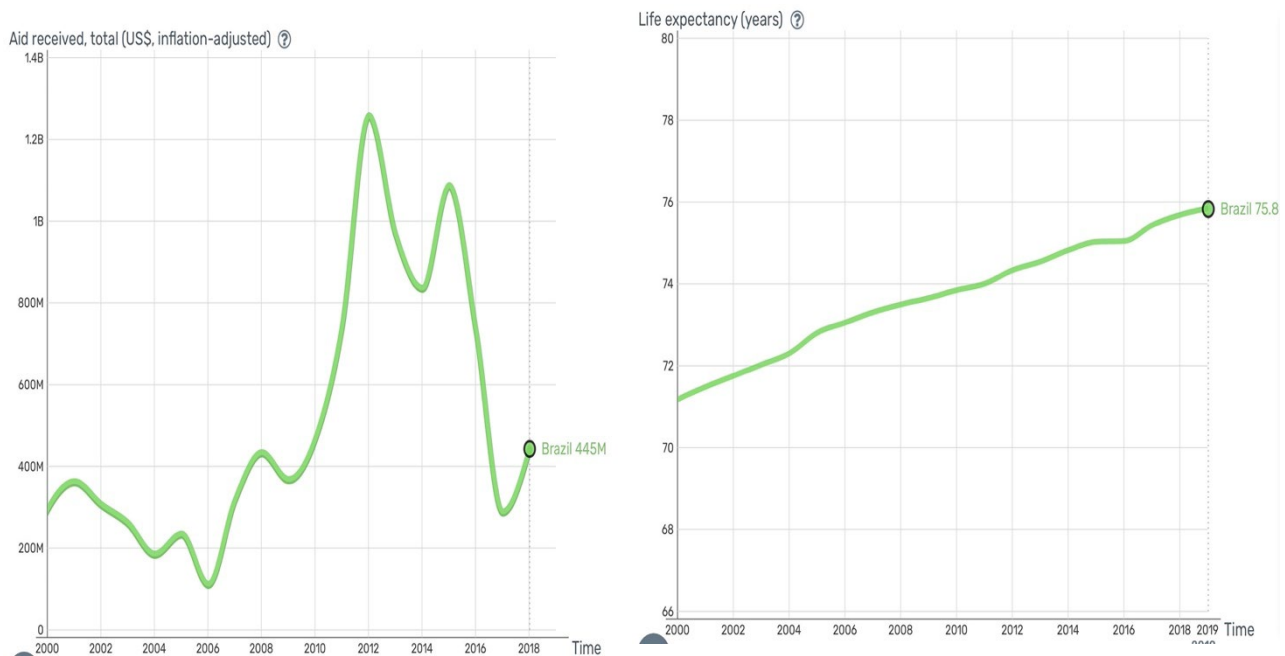


Figure 5: BRAZIL: life expectancy (years). (GapMinder, Brazil Life Expectancy (Years), 2019)

Figure 5 above shows the change in life expectancy from Brazil between 2000 to 2019. Over this same time period, the amount of aid given to Brazil reached a peak of about US \$1.25 billion in 2012, as can be seen next to Figure 5. One can infer based on this data that the aid received had a limited impact on the life expectancy of Brazil as there is no distinct correlation between these two graphs. In 2012 and 2016, there was a steep increase in aid received compared to the rest of the time period from 2000-2019. However, in 2016, life expectancy reduces slightly before increasing steadily again. However, this drop is so slight that it can be considered statistically insignificant. Two years earlier, in 2014, there was a drastic reduction in aid received with Brazil only receiving US\$825 million, much less when compared to the 2013 and 2015.

While one could therefore argue that this fractional change suggests a direct impact, there is more evidence to the contrary. Aid has increased and decreased substantially over the years and whereas



the graphs for GDP and GNI show similar (although not as drastic) changes in response, there are certainly clear upward and downward trends. Whereas the life expectancy in Brazil trends consistently with no noticeable peaks or troughs. Of course, one would only expect peaks and troughs in life expectancy to occur if there was a war or nationwide epidemic, but the data by no means conclusively suggests a direct positive impact that is caused by the aid received.

To further highlight this point, the only decline (a fractional decline between 2015 and 2016) came at the exact same time as the aid received was in decline therefore not allowing for a reasonable lag to occur. In the years 2005 to 2006 there had been a decline of aid received from just over US\$200 million to just over US\$100 million respectively and yet this had no negative effect on the life expectancy over this time period. Therefore, the dip in life expectancy in relation to a decrease in aid received should be ignored and no real direct impact can be inferred.

Literacy Rates:

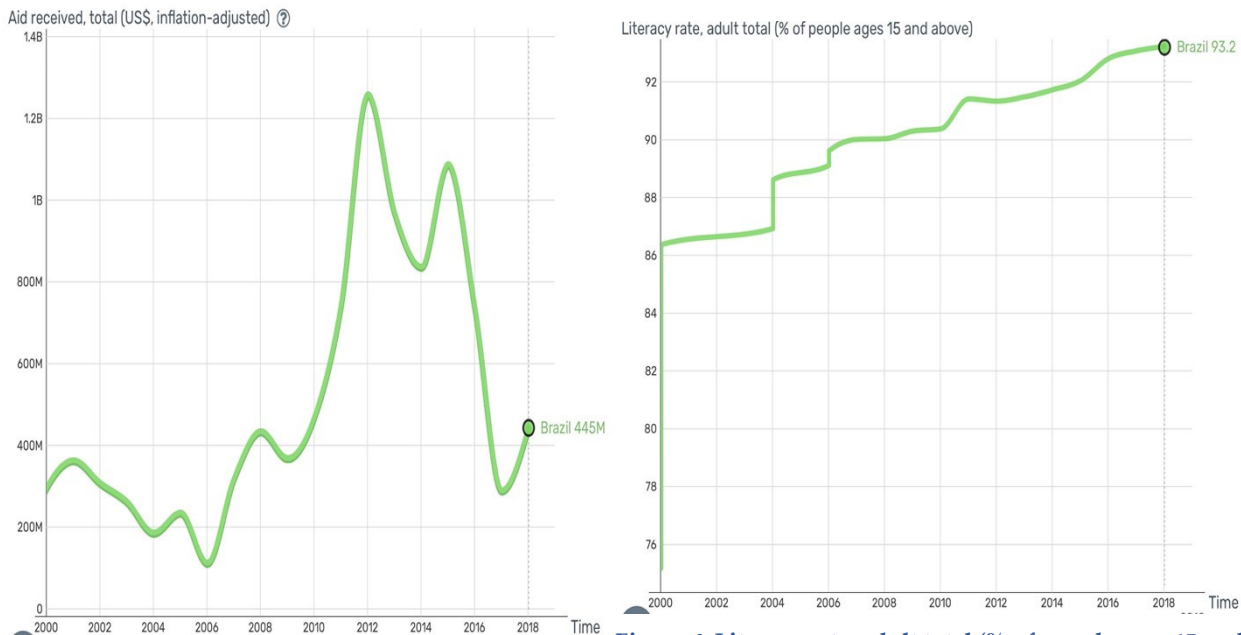


Figure 6: Literacy rate, adult total (% of people ages 15 and above). (GapMinder, 2018) (GapMinder, Brazil Literacy Rates (% of peoples age 15 and above), 2018)

Figure 6 shows the change in literacy rates in Brazil between 2000 to 2019. Over this same time period, the amount of aid given to Brazil reached a peak of about US \$1.25 billion in 2012, as can be seen in the graph next to Figure 6. One can infer based on this data that the aid received had no impact on the literacy rates of Brazil as there is no distinctive correlation between these two graphs. Furthermore, even if there was a correlation that could be inferred, this should be taken with a good deal of caution. In 2000, 2004, and 2006 there are sheer increases which points towards an issue in data collection.

Russia:

Key Statistics

Population (Worldometer, n.d.):

- 2000: 146,404,903
- 2019: 145,872,256

Size of country (The World Bank, n.d.):

- 2000: 16,381,340 sq.km
- 2019: 16,376,870 sq.km

GDP³

³ The World Bank (The World bank, n.d.) It is measured in US\$, inflation adjusted.



- 2000: 780B
- 2019: 1.46TR

HDI⁴:

- 2000: 0.722
- 2019: 0.824

Russia's economic state overview

Russia's transition from a centralised to market economy began in 1991. (Berglof, Kunov, Shvets, & Yuaeva, 2003) It can be observed that an economic decline is not unusual when countries are in the first stages of a transition. (Berglof, Kunov, Shvets, & Yuaeva, 2003) The severity of the decline is dependent on the financing of natural resources. Likewise, the speed at which countries recover depends on the progression speed of any reforms (Berglof, Kunov, Shvets, & Yuaeva, 2003).

Following Russia's stagnation period, investment started to grow in the 2000s, bringing the investment in physical capital levels to 17.4% (Berglof, Kunov, Shvets, & Yuaeva, 2003), showing how the economy is emerging from its initial decline stage. Furthermore, it was argued that reforms were needed in Russia at this time as parts of the country were growing stronger than others (Berglof, Kunov, Shvets, & Yuaeva, 2003), which could make the speed of the country's economic growth slower. Economic growth is sourced from the size of the labour force, capital, and productivity (Berglof, Kunov, Shvets, & Yuaeva, 2003).

Challenges they faced as an economy

Challenges which accompanied this societal change included Russia's lack of social science knowledge and data, making it harder for Russia's policymakers and Western advisors to introduce accurate reforms (Berglof, Kunov, Shvets, & Yuaeva, 2003).

Since the Year 2000, Russia experienced a greater decline in output compared to other transition countries due to the collapse of the government which particularly manifested itself in rent-seeking behaviour and inability to protect property rights. Rent-seeking behaviour entails trying to increase your personal existing wealth without generating new wealth (Berglof, Kunov, Shvets, & Yuaeva, 2003). However, problems which arise from this include decreased economic output, dissipation of resources (Encyclopedia Britannica, 2019). Britannica describes property rights as "the sum of rights and duties, privileges and no-rights, powers and liabilities, disabilities and immunities that exist with respect to things" (Alexander & Donahue, 2018), so when property rights are unclearly defined, market failure can occur (Ross, 2021).

Where they Received their aid from:

When setting out the aims, objectives and scope for this paper, the objective was to establish to what extent had economic aid had impacted the development indicators of the BRIC economies since 2000. To do this successfully, it is important to capture the same datasets for each country so that

⁴ United Nations Development Program (Human Development Reports, UNDP, n.d.).



comparisons can be drawn. Unfortunately, there is a fundamental gap in the data relating to Russia. The Gap minder toolkit created by Ola Rosling in 2005 is an extremely useful tool in establishing a comprehensive range of national metrics. All the data is clearly presented and users of all backgrounds and educational levels can engage with the interactive tools. Ola Rosling is not the owner of the data captured in Gap minder. He is very clear on this. Instead, GapMinder sources all the necessary information from organisations such as the United Nations Development Program (UNDP) and The World Bank. A comprehensive and well-rounded secondary source, GapMinder has no relevant data on the aid received in Russia.

Upon a detailed review of the original sources such as the UNDP and the World Bank, it is possible to confirm that the data missing from Gapminder is not accessible in the public domain which poses a problem for this the research and analysis required to answer the original research question.

The data on Russia relating to aid is so limited, that any conclusions drawn based on the data cannot be considered reliable or valid. Therefore, Russia must be excluded from the analysis. The limited information that has been gathered is shrouded with doubt. Primarily, if the organisations (the primary sources) – and the Gapminder tool (a reliable secondary reference point) – don't have this data available, it brings into question where the data, that is available, sources its information from. In other words, the reliability of the available data must be heavily scrutinised.

The authors of this paper considered documenting the GDP, GNI, HDI, Life Expectancy and Literacy Rate data because this was available publicly, but with no way to compare this to the aid received, data from Russia can no longer form part of the overall conclusions, therefore any further discussions on the country will be extremely brief.

India:

Key Statistics

Population (Worldometer, n.d.):

- 2000: 1,056,575,549
- 2019: 1,366,417,754

Size of country (The World Bank, n.d.):

- 2000-2019: 2,973,190 sq.km

GDP⁵:

- 2000: 801B
- 2019: 2.7TR

HDI⁶:

⁵ The World Bank (The World bank, n.d.) It is measured in US\$, inflation adjusted.

⁶ United Nations Development Program (Human Development Reports, UNDP, n.d.).



- 2000: 0.495
- 2019: 0.645

India's economic state overview

India's phase of rapid economic growth and structural changes in the productive system commenced in 1992 (Saccone & Valli, 2009). A key aspect in raising India's average growth rate has been a general movement in economic policy toward increased dependence on the market for allocation of resources, including greater openness to the global economy (Singh & Srinivasan, 2006). The strong sustained growth in China has raised optimism for India to follow in its footsteps. Dissimilar to China's economic growth, India's performance has reflected the rapid expansion of the service-producing industries and modest levels of investment.

Successive reforms since the mid 1980s have progressively moved India from a dirigiste economy towards a market-based model (Policy Brief OECD, 2007). A dirigiste state is one where the government has a lot of control in the country's economy (Cambridge Dictionary). Through privatisation, it has been able to transform towards an economic system where the supply and demand direct the production of goods and services (Dictionary of Unfamiliar Words).

By 2007, India was already the third largest economy in the world, having positive effects such as reducing poverty levels. (GapMinder, 2013) India's fast-growing services sector has given them the opportunity to skip the intermediate industrialisation-led phase during its economic transformation. This has brought concerns about the expanding labour force in a "jobless" nature of economic development, leaving a large proportion of the population unemployed with low living standards (Policy Brief OECD, 2007).

Challenges they faced as an economy

India was unable to insulate itself from the unfavourable changes in the global financial markets. In 2008–2009, economic growth slowed to 6.7 percent, a drop of 2.1 percent over the preceding five years. The growing nation saw a bigger problem in the capital and current account of the balance of payments as the effects began to aggravate. As a result, there was an imbalance in supply and demand on the foreign exchange market, which had an impact on the stock market and exchange rates (Bajpai, 2011).

Where they received their aid from

Economic aid has contributed to India's growth potential. The most prominent donors to India's ODA are from Japan and the World Bank (UK Parliament, 2019):

- Japan is the highest country donor between 2013 and 2017 with over US\$14 billion donated to India.
- World Bank is the second largest donor and largest multilateral donor with over US\$6.5 billion donated to India.
- Germany is the second highest country donor between 2013 and 2017 with over US\$5 billion donated to India.

- According to USAID, between 1946-2012, India received US\$651 billion in economic assistance from the US (The Times of India, 2015).
- With more than US\$4.5 trillion received between 1960 and 2015, India has been the world's largest recipient of foreign aid (Asmus, Fuchs, & Müller, 2017)

Comparison of Changes in Indicators:

The aid that India received from 2000 to 2018 is US\$40.97 billion- a significant investment, designed to have a material impact on the indicators of development. There have been huge fluctuations over time, which if there is to be a positive correlation between this and the indicators of development, would mean similar (albeit less stark) fluctuation in the graphs that capture GDP, GNI, HDI, life expectancy and literacy rates.

GDP:

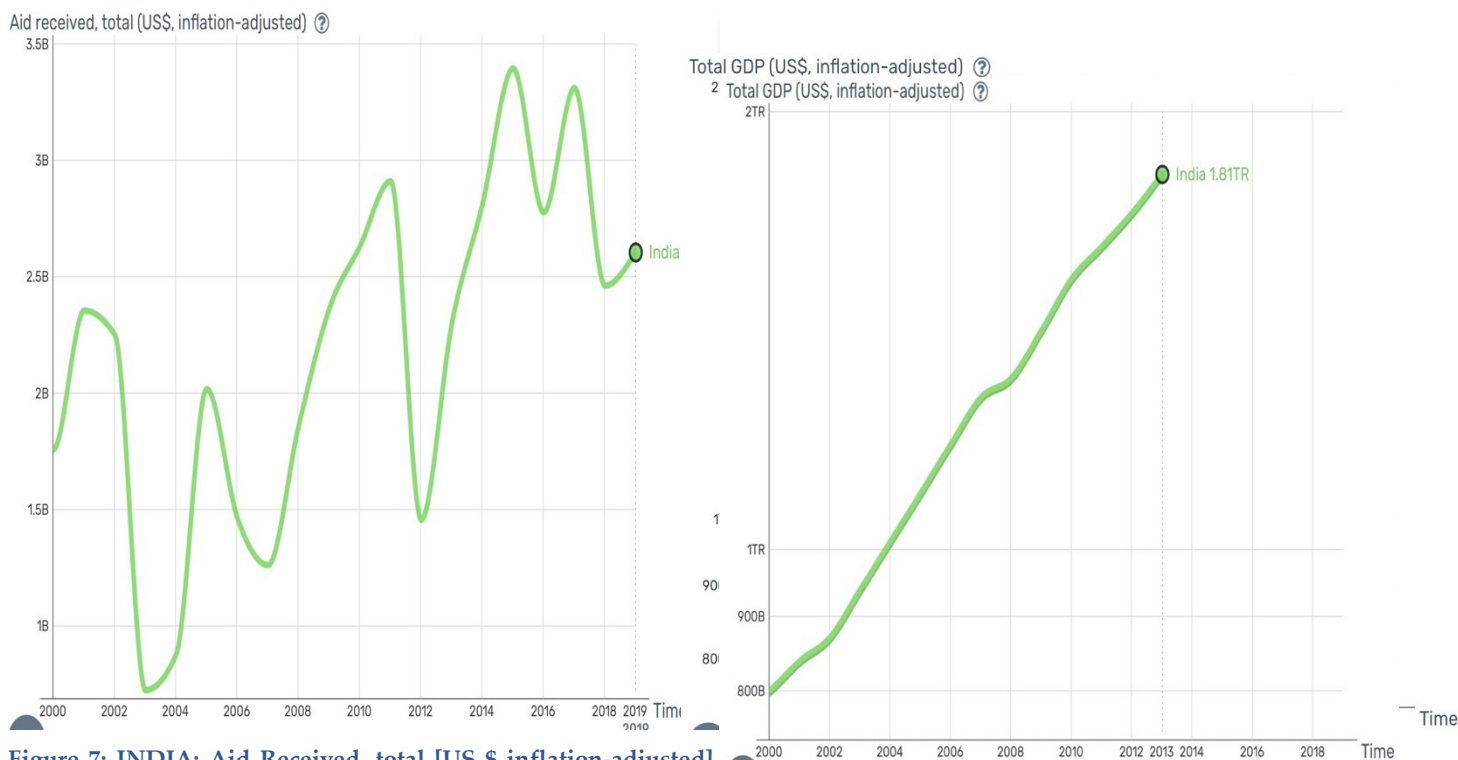


Figure 8 above shows the changes in GDP output in India between 2000 to 2013. Over this same time period, the amount of aid given to India reached a peak of about US \$ 3.4 billion, as can be seen in Figure 7. One can infer based on this data that the aid received had a positive impact on the GDP output of India as there is a distinct positive correlation between these two graphs. In 2007, there was a major decrease in the amount of aid received in India compared to the previous and following years as they only received around US\$1.25 billion. In the same year, there is a plateau in the GDP data set.

However, there is no two-year lag in between the aid reduction and the GDP growth reduction, which is seen in the slight plateau. With this in mind, this correlation is less likely to signify a direct impact by the reduction of aids on the country's GDP.

It is difficult to suggest that there may be no impact from aid on GDP given the positive correlation, but the turbulent nature of aid received, and the almost perfectly steady increase of GDP goes some way to doing just that. With both these arguments taken into consideration, it is not possible to infer one way or another on the impact that changes in aid received had on GDP. Further data needs to be gathered in order to clarify this and is what the second part of this paper seeks to achieve.

GNI:

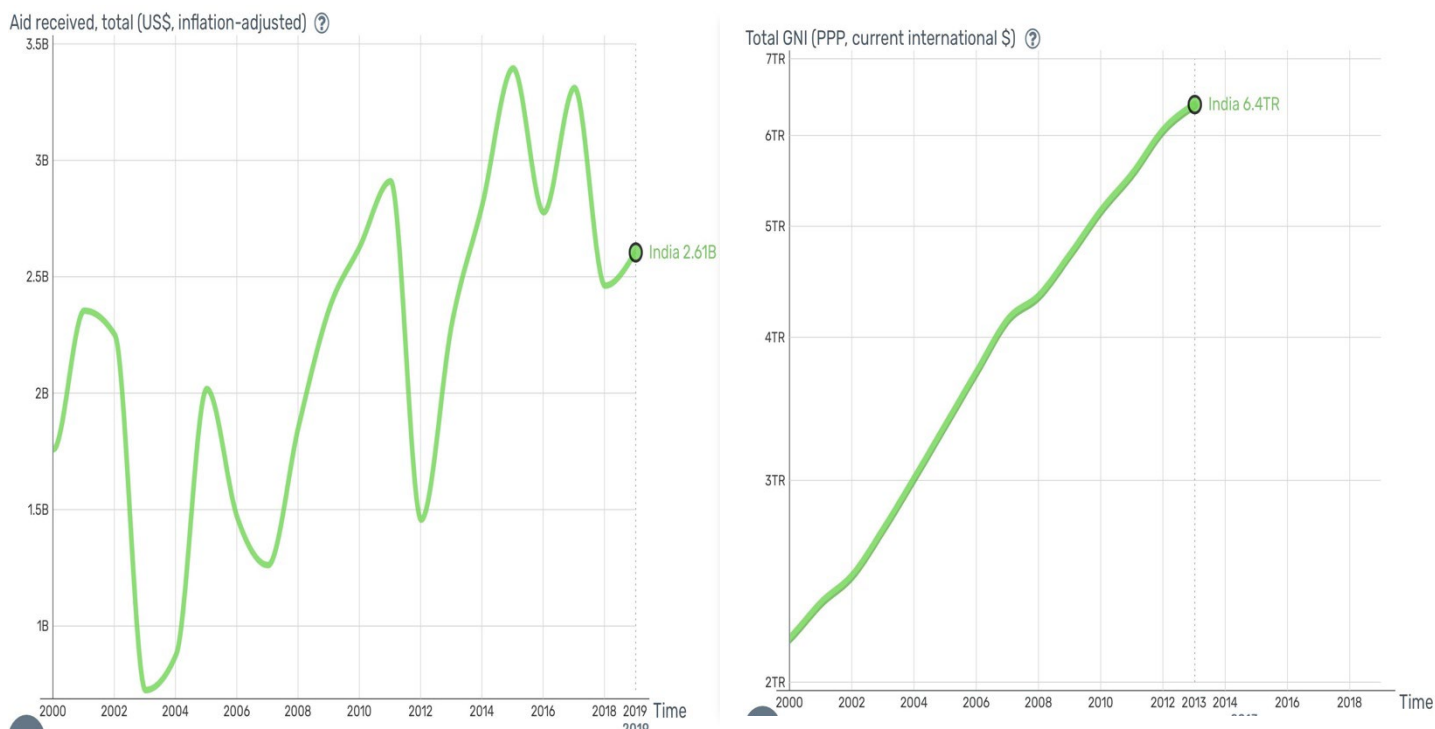


Figure 9: INDIA: Total GNI [PPP, current international \$]. (GapMinder, India Total GNI (PPP, Current international \$), 2013)

Figure 9 above shows the change in GNI in India between 2000 to 2013. Over this same time period, the amount of aid given to India reached a peak of about US \$ 3.4 billion, as can be seen in the figure alongside Figure 9. One can infer based on this data that the aid received had a positive impact on the GNI of India as there is a distinct positive correlation between these two graphs. For example, in 2007, there was a major decrease in the amount of aid received in India compared to the previous and following years as they only received around US\$1.25 billion. Similarly, to the previous analysis of the correlation between aid received and GDP, one year later, in 2008, there is also seen to be a slight plateau in the GNI data set. While there is a notable plateau, there is no two-year time lag between the aid reduction and the GNI growth reduction. As a result, this correlation is less likely to mean that aid received directly impacts Indias' GNI.

Nevertheless, it is difficult to suggest that there may be no impact from aid on GNI, given both data sets similar increasing trend. However, the turbulent nature of the aid received and the steady nature of the GNI suggests that aid received had little impact on the growth of GNI. Given both of these factors, further data needs to be gathered in order to confirm if the aid received directly impacted India's GNI. The second part of this paper will seek to achieve this.

HDI:

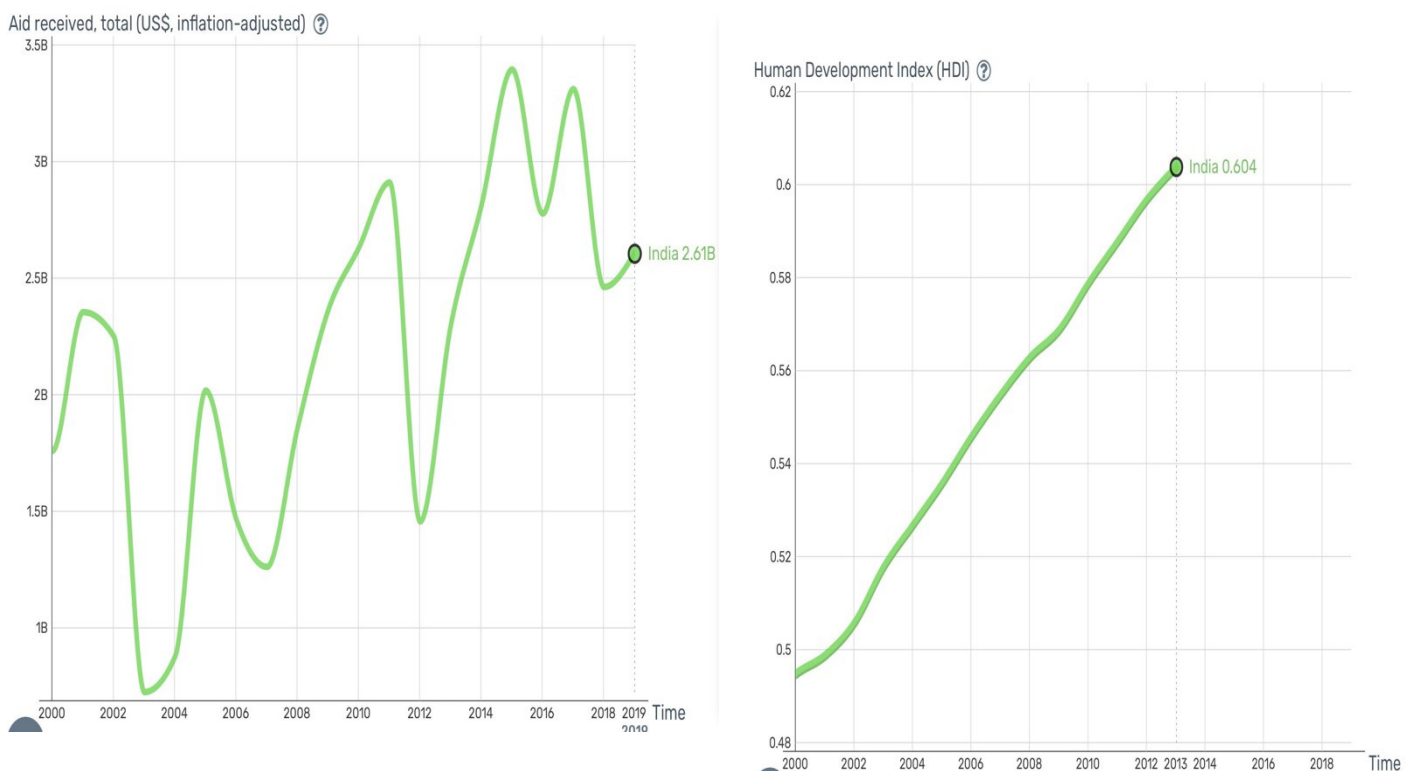


Figure 10: INDIA: Human Development [HDI]. (GapMinder, India Human Development Index (HDI), 2013)

Figure 10 above shows the change in HDI in India between 2000 to 2013. Over this same time period, the amount of aid given to India reached a peak of about US \$ 3.4 billion, as can be seen in the graph alongside Figure 10.

Based on this data, it can be inferred that the aid received during this time period had limited impact on the HDI of India as there is no distinct correlation between aid received and HDI. The HDI of India has increased in a steady, linear way whilst aid received fluctuated until 2010 where it drastically decreased until 2012, not so dissimilar to the decrease from 2001-2002. However, during this time period there is no seen increase in HDI suggesting there's no correlation.

Nevertheless, one can expect to see a two-year time lag in productivity after receiving the aid so the effects on HDI may only be seen in the years after the aid was received. However, the lack of data after 2013 means one is unable to see the effect on HDI of the aid received in 2015. Therefore, more data is needed on HDI after 2013 to determine if there is a direct positive correlation between aid received and HDI. It is difficult to suggest that there may be no impact from aid received on HDI due to the similar positive increase. Despite this, further data must be collected in order to clarify this and this is what the second part of the paper will seek to achieve

Life Expectancy:

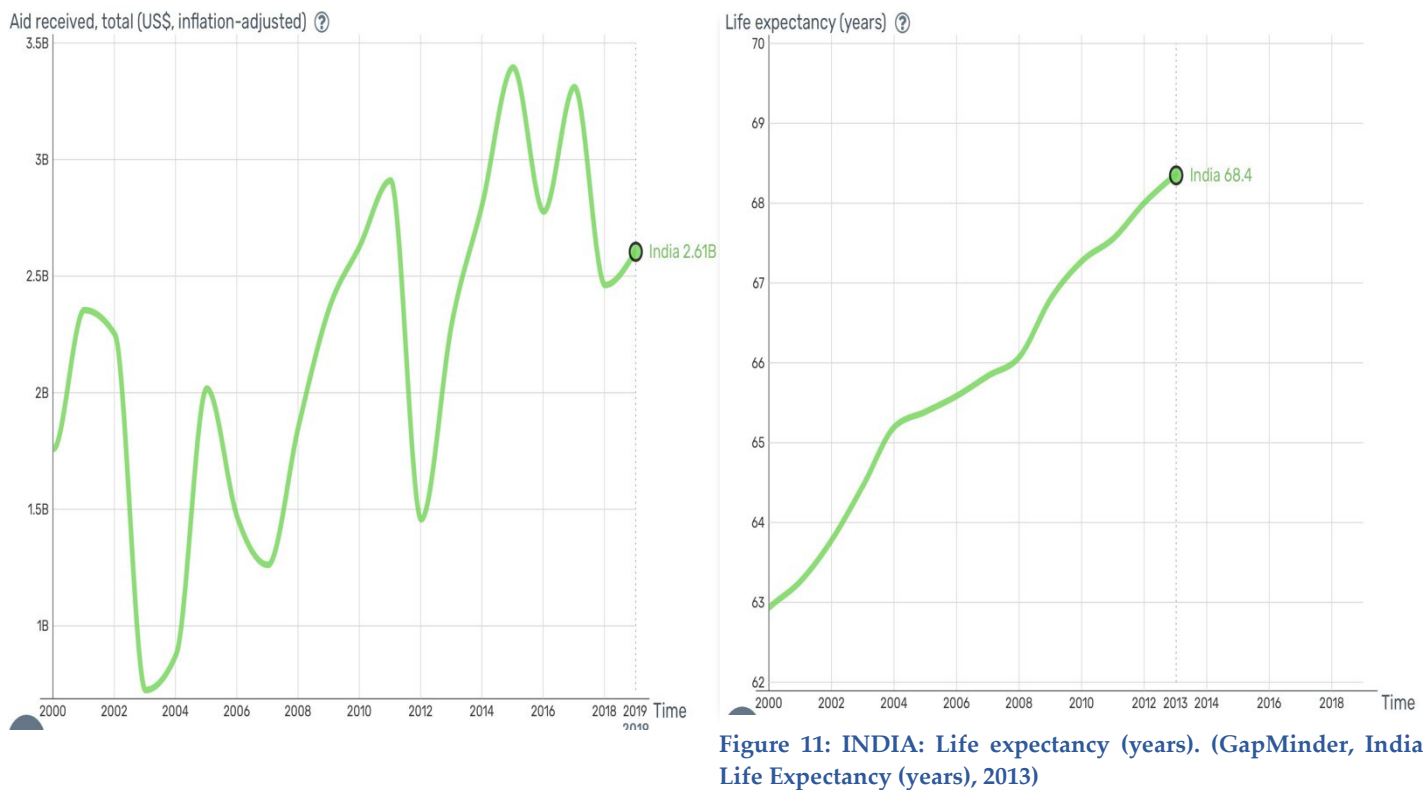


Figure 11 above shows the increase in life expectancy in India between 2000 to 2013. Over this same time period, the amount of aid given to India reached a peak of about US \$ 3.4 billion, as can be seen in the graph alongside Figure 11.

This 5.4 year increase in life expectancy is relatively large when compared with other nations such as Mexico which only increased from 74 to 75.5 from 2000 to 2013. (GapMinder, 2021) When comparing India to Brazil, while the life expectancy is still lower, the data available for India is only available up to 2013. With a relatively steady trajectory, one could suggest that today, the life expectancy of India could be on par with that of Brazil, if not better.

One can infer based on this data that the aid received had some impact on the life expectancy in India as there is only some positive correlation between these two graphs. In 2003, India received the least amount of aid within the time period. Two years following on from this, the life expectancy, which was on a steep incline, began to slow down. It wasn't until 2008 when the trajectory picked back up.

However, where the steep incline restarted in 2008, the aid received two years previously was still relatively low, suggesting that the improvements noted was not strongly caused by the aid.

Despite this, the general trend of both data correlates as both are positively increasing so while not conclusive, an inference of a causal link between aid received and life expectancy can be made with caution.

Literacy Rates:

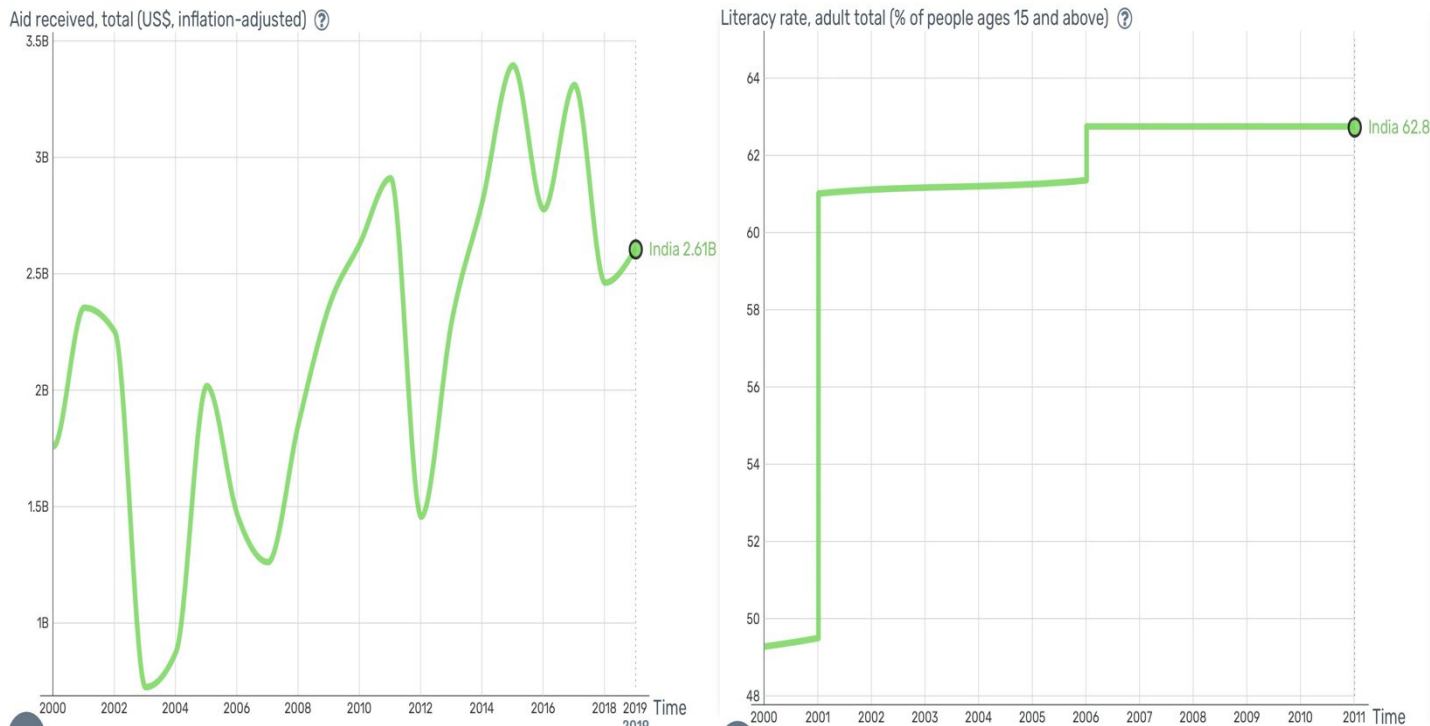


Figure 12: INDIA: literacy rate, adult total [% of people ages 15 and above (GapMinder, India Literacy Rates (% of people ages 15 or above), 2011)

Figure 12 above shows the increase in literacy rates in India between 2000 to 2011. Over this same time period, the amount of aid given to India reached a peak of about US\$ 3.4 billion, as can be seen in the graph alongside Figure 12.

This data does not appear to be very conclusive, while there is no doubt a huge upward trend, the nature of this must be called into question. The trend does not increase in a stable pattern. Instead, it makes almost impossible progress after periods of no/limited change. This could perhaps indicate that the metric is only calculated once every six years or so. However, between 2001 and 2006, it does appear that there are fractional increases year on year which suggest this data is routinely gathered.

Should this be the case, the vertical jumps are somewhat alarming, particularly that of 2001. It is a potential indication of poor levels of data collection and therefore the reliability and even validity must be drawn into question. Therefore, while it is possible to infer that the aid received caused the



increase in literacy rates. Further data needs to be gathered in order to confirm this inference. The second part of this paper will seek to establish this.

China:

Key Statistics

Population (Worldometer, n.d.):

- 2000: 1,290,550,765
- 2019: 1,433,783,686

Size of country (The World Bank, n.d.):

- 2000: 9,424,700 sq.km

GDP⁷:

- 2000: 2.77 TR
- 2019: 14.2 TR

HDI⁸:

- 2000: 0.588
- 2019: 0.761

China's economic state overview

China's growth during the last two decades has been remarkable, and as a result of this extraordinary achievement, China's place in the global economy has shifted dramatically. The world, as well as China, benefits from rebalancing the Chinese economy and by late 2003 worries about overheating had resurfaced, and the public policy reaction had shifted back to monetary and fiscal restraint. (Yongding, 2012) China was able to defend the export industry by tightening direct monetary and fiscal policy, which contributed significantly to the favourable improvements in China's economy during the 2000s (Yongding, 2012) Behind the growth of China's economy, there's been a dramatic structural transformation, especially, rapid urbanisation and industrialisation.

China's impressive development performance since the 2000s:

1. Can be attributed to a dual-track approach that allowed it to accomplish both stability and dynamic transformation at the same time.
2. China was a latecomer who grew in accordance with its comparative advantage and capitalised on the potential of backwardness (a state of not being advanced) (Lin, 2011).

China hardly registered on the global economic scale in 1990, accounting for roughly 1.6 percent of worldwide GDP, but it is now the world's second largest economy, accounting for 8.6 percent of global GDP in 2009 (Lin, 2011).

⁷ The World Bank (The World bank, n.d.) It is measured in US\$, inflation adjusted.

⁸ United Nations Development Program (Human Development Reports, UNDP, n.d.)



Behind the growth of China's economy, there's been a dramatic structural transformation, especially, rapid urbanisation and industrialisation.

Challenges they faced as an economy:

China experienced a rise in regional disparities that influenced uneven growth across the nation (Wu, 2001). In addition, China's population began ageing quickly starting in the middle of the 1990s despite the country's constantly expanding population. Since there are so few people in the working sector, this leads to a lack of labour supply, a deteriorating fiscal balance, an inadequate welfare system, etc., which could slow down productivity and economic growth (Cai, 2006).

Where they received their aid from:

Though the growth potential of China is well documented, aid still had a role in the country's financial makeup. Prior to 2000 and in the years that followed, China received aid from the following donors (UK Parliament, 2019):

- Germany is the largest donor country as they donated between 2013- 2017 they donated US\$3.8 billion to China.
- France is the second largest donor country as they donated US\$1.1 billion to China between 2013- 2017.
- The EU is the largest multinational organisation to donate aid to China with US\$918,300 donated between 2013- 2017.

Comparison of Changes in Indicators:

The aid that China received from 2000 to 2018 is US\$16.97 billion showing the significant investment made towards this country to help it economically develop. However, more recently, China can be considered as an aid donor rather than an aid recipient country, reflecting the negative net figure of total aid received.

GDP:

Aid received, total (US\$, inflation-adjusted) ?

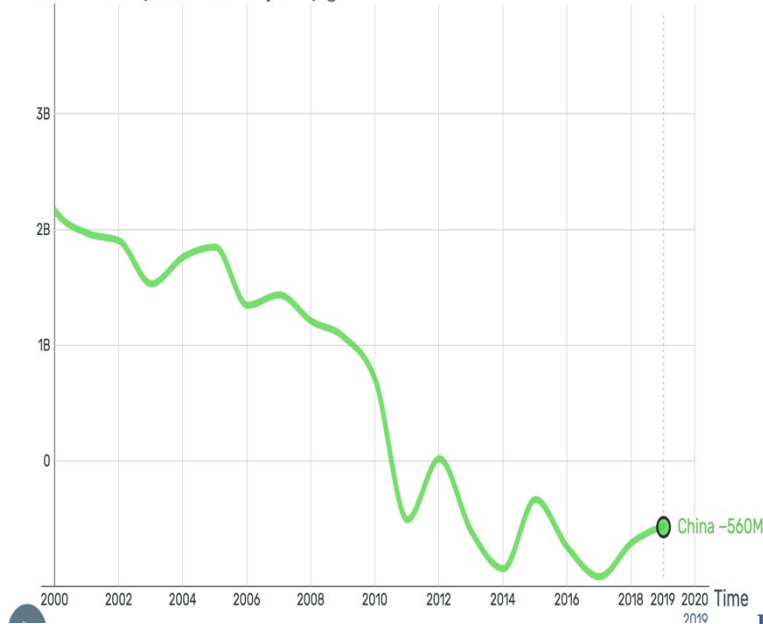


Figure 13: CHINA: Aid received, total [US \$, inflation-adjusted]. (GapMinder, China Aid recieved, total (US\$ Inflation- adjusted), 2019)

Total GDP (US\$, inflation-adjusted) ?

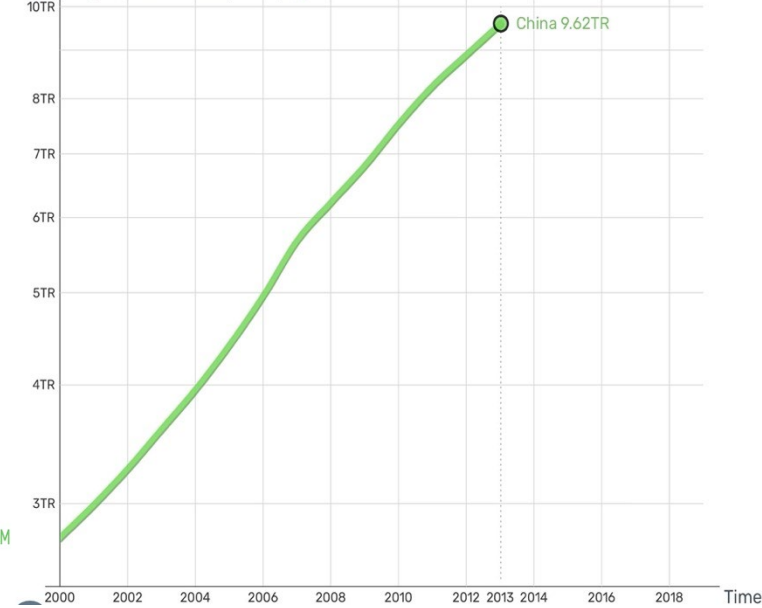


Figure 14: CHINA: Total GDP [US \$, inflation-adjusted (GapMinder, China Total GDP (US\$ Inflation- adjusted), 2013)

Figure 14 above shows the change in GDP output in China between 2000 to 2013. Over this same time period, the amount of aid given to China reached a peak of just above US \$ 2 billion, as can be seen in Figure 13.

One can infer based on this data that the aid received had no impact on the GDP output of China as there is no distinct correlation between these two graphs. In fact, there is a direct negative correlation between the two data sets. Throughout this time period between 2000 and 2013, the aid received decreased from over US\$2 billion to US\$-608million, reflecting how they are now more significantly a donor country.

From 2010 – 2011, China stopped receiving aid for the first time. While they had been trending downward in terms of aid received for some while, a removal of this altogether could have had a huge detrimental impact on the indicators of development. In 2011 China started to give foreign aid to less developed countries, but hastily stopped this act in 2012, returning to neutrality. One would be forgiven for thinking that China withdrawing from giving Aid in this year was due to the need to stabilise their own economy and guarantee that their indicators of development did not decrease. However, the data, for GDP in particular, shows that this was not the case. By looking at the data, there is no such suggestion that the GDP was under pressure by the lack of aid and in 2013 China began to donate again. This lack of change in the absence of aid and especially when China started to donate strongly suggests that there is no correlation.

As the GDP increases from just below US\$3 trillion to US\$9.62 trillion. One can infer from this negative correlation that a decrease in aid received caused an increase in GDP output. However, there is a chance that the decrease in aid received did not directly impact the GDP output. However, that is a strong claim to make which would require a strong evidence base in order to do so.

What seems more appropriate to suggest is that the decrease in aid received did not directly impact the GDP data, but further data needs to be gathered in order to confirm this inference. The second part of this paper will seek to establish this.

GNI:

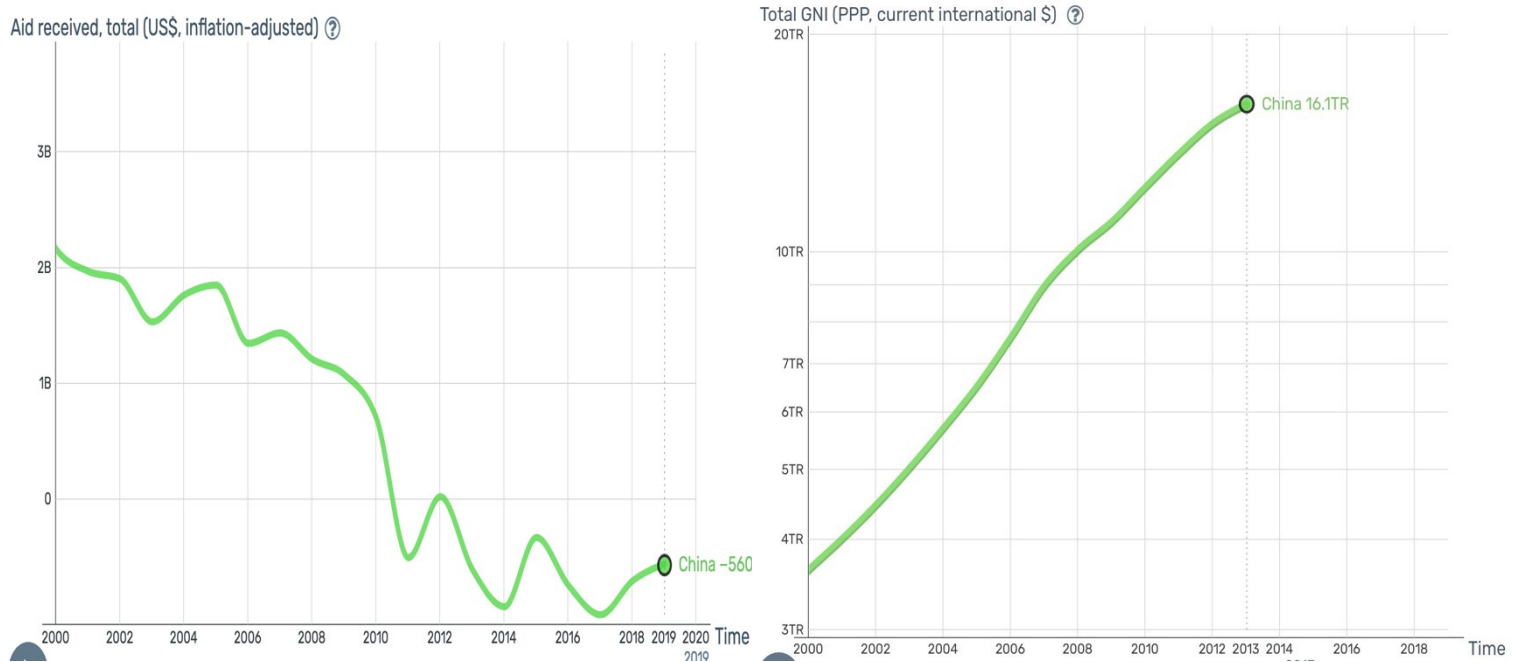


Figure 15: CHINA: Total GNI [PPP, Current international \$]. (GapMinder, Total GNI (PPP, current international \$), 2013)

Figure 15 above shows the change in GNI in China between 2000 to 2013. Over this same time period, the amount of aid given to China reached a peak of just above US\$2 billion, as can be seen in the graph alongside Figure 15. One can infer based on this data that the aid received had no impact on the GNI of China as there is no distinct correlation between these two graphs. In fact, there is a direct negative correlation between the two data sets.

Between 2010-11 China stopped receiving aid for the first time as total aid received hits US\$0. While they had already been trending downwards in terms of aid received since the beginning of the period, the removal of any type of aid received could have led to a detrimental negative impact on its development indicators. However, by looking at this data, it is clear that GNI was not under pressure by the lack of aid since 2010-11. In fact, GNI has been increasing between 2000 to 2013 from just below US\$4 trillion to US\$16.1 trillion. One can infer from this negative correlation that a decrease in aid received caused an increase in GNI output. However, this is a strong claim to make and would require

a stronger evidence base and further data to confirm if the withdrawal of aid directly increased GNI in China. The second part of this paper will seek to establish this.

HDI:

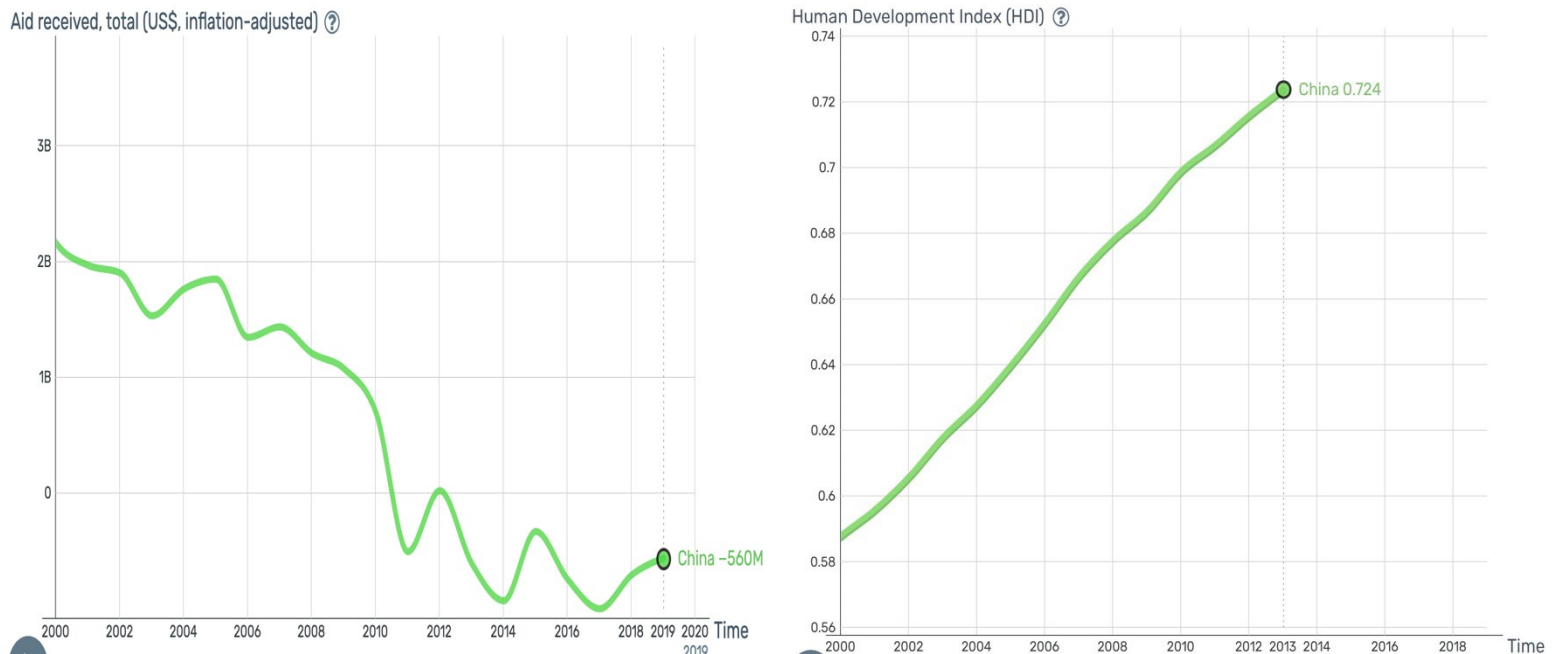


Figure 16: CHINA: Human Development Index [HDI]. (GapMinder, China Human Development Index (HDI), 2013)

Figure 16 above shows the change in HDI in China between 2000 to 2013. Over this same time period, the amount of aid given to China reached a peak of just above US\$2 billion, as can be seen in the graph alongside Figure 16.

Similarly, to GDP and GNI, one can infer based on this data that the aid received had no impact on the HDI of China as there is no distinct correlation between these two graphs. In fact, there is a direct negative correlation between the two data sets. Throughout this time period between 2000 and 2013, the aid received decreased from over US\$2 billion to US\$-608million, demonstrating that China shifted from an aid recipient to an aid donor.

Between 2010-2011, China stopped receiving aid. Though the aid received had been trending downwards for some while, the total withdrawal of all aid may have had a detrimental impact on development indicators including HDI. However, the data for HDI shows that this was not the case as HDI continues to steadily increase from 0.59 in 2000 to 0.724 in 2013. One can infer from this negative correlation that a decrease in aid received caused an increase in HDI. However, this is a strong claim to make and there is a chance that the decrease in aid received did not directly impact the HDI data, but further data needs to be gathered in order to confirm this inference. The second part of this paper will seek to establish this.

Furthermore, it must be taken into consideration that HDI for China has only been recorded until 2013, and the effects of the China halting aid received between 2010-11 may only effect HDI in later years due to a time lag. More recent data on HDI must be collected in order to analyse the correlation

Life Expectancy:

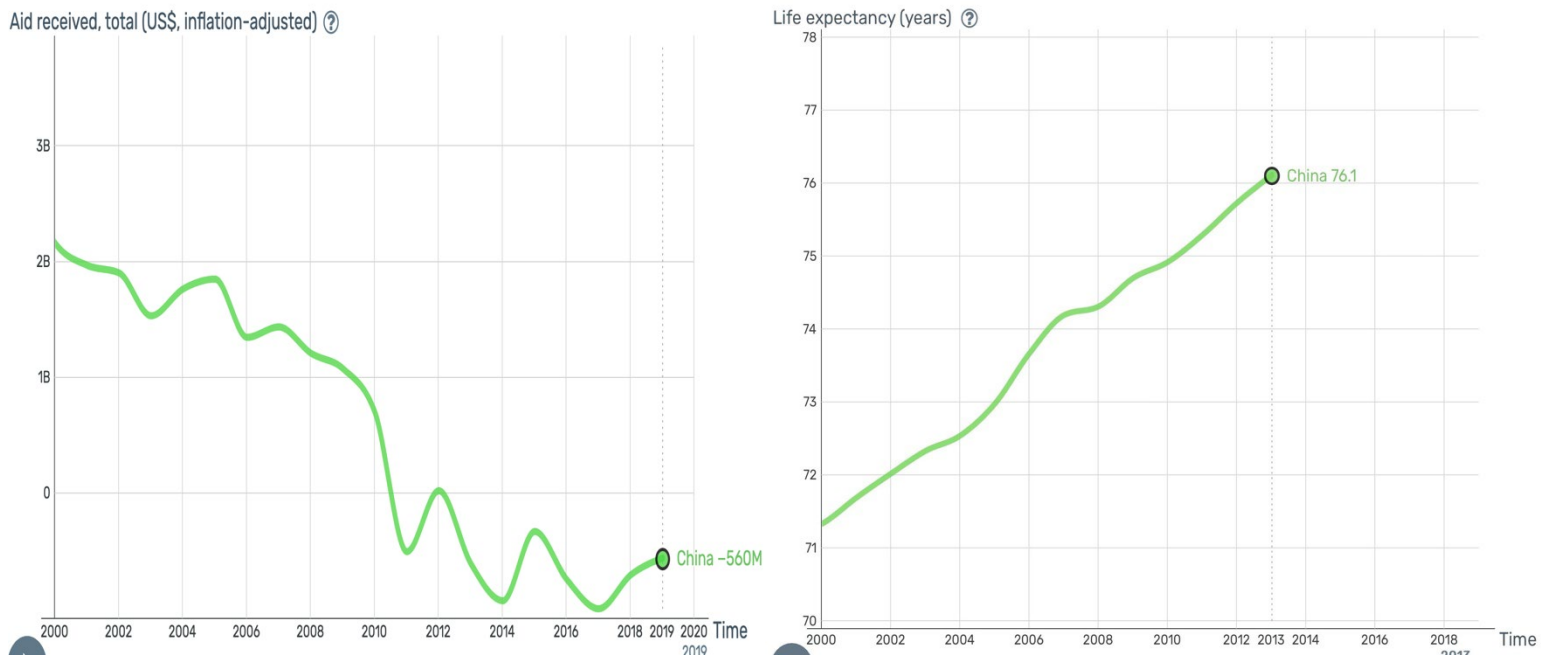


Figure 17: CHINA: Life expectancy [years (GapMinder, China Life Expectancy (years), 2013)

Figure 17 above shows the change in life expectancy output in China between 2000 to 2013. Over this same time period, the amount of aid given to China reached a peak of just above US \$ 2 billion, as can be seen in the graph alongside Figure 17.

One can infer, based on this data that the aid received had no impact on the life expectancy of China as there is no distinct correlation between these two graphs. In fact, there is a direct negative correlation between the two data sets. Throughout this time period between 2000 and 2013, the aid received decreased from over US\$2 billion to US\$-608million, revealing how they became more of a donor country than a recipient during this time period.

Between 2010-2011, China stopped receiving aid for the first time. Though they had been trending downwards in terms of aid for a while, a total removal of all aid could have had a detrimental impact on development indicators. However, this was not the case for life expectancy as during the same time period, life expectancy increased from just above 71 to 76.1. Though this is a similar percentage increase to the life expectancy of India, at the beginning of 2000, India had a life expectancy of 63

which is 8 years younger than that of China. This increasing life expectancy contributes to the growing population size of China and if the trend of life expectancy continues at this trajectory, the population size will only continue to increase. It will be interesting to observe the changes this has on the indicators of development in the coming years.

One can infer from this negative correlation that a decrease in aid received caused an increase in life expectancy. However, this is a strong claim and there is a chance that the decrease in aid received did not directly impact the life expectancy data. Therefore, further data needs to be gathered in order to confirm this inference. The second part of this paper will seek to establish this.

Literacy Rates:



Figure 18: CHINA Literacy rate, adult total [% of people ages 15 and above]. (GapMinder, China Literacy Rates (% of people ages 15 and over), 2018)

Figure 18 above shows the change in literacy rates in China between 2000 to 2013. Over this same time period, the amount of aid given to China reached a peak of just above US \$ 2 billion, as can be seen in the graph alongside Figure 18.

This data does not appear to be very conclusive, while there is undoubtedly a huge upward trend, the nature of this must be called into question. The trend does not increase in a stable pattern. Instead, it makes almost impossible progress after periods of none or limited change. This could perhaps dictate that the metric is only calculated every 8-10 years. The vertical jumps, especially in 2019 are somewhat alarming. It is a potential indicator of poor levels of data collection and therefore the reliability and even validity must be drawn into question. Therefore, while it is possible to infer that



the aid received caused the increase in literacy rates, further data must be recorded in order to confirm this inference. The second part of this paper will seek to establish this.

Section 1 conclusion:

Brazil has seen an almost direct correlation between aid received and its development indicator. Nevertheless, Brazil had several high-profile international events during the time period such as the World Cup in 2014 and the Olympics in 2016, which also would have had a great impact on development indicators. Therefore, it is difficult to accurately determine the extent to which aid received had an impact on development because it is not possible to view it in isolation.

Due to a lack of available and reliable data on aid received in Russia, it was removed from the study.

While the aid received in India greatly fluctuated during this time period, the development indicators, have a general positive trend. Nevertheless, it is impossible to view the impact of aid received on development indicators in an isolated way as there are other external factors impacting development indicators. For example, India was greatly affected by the 2008 financial crash which is reflected as a slight plateau in its GNI and GDP.

In China, between 2000 to 2013, the general trend of aid received decreased and China stopped receiving aid between 2010-11. However, all of China's development indicators that had been analysed in this paper increased in a mostly steady trend, showing no correlation between aid received and development indicators. Despite this, the aid received in China before the time period in question may have had the desired result and after 2000, China became self-sufficient allowing for a reduction in aid without having any impact on development indicators and even allowing them to become an aid donor from 2010. While this is beyond the remit of this paper, it is worth exploring the data of how aid received impacted the development of China before the 21st century.

By the very definition, aid is supplementary and other initiatives, events and day to day activities would have taken place simultaneously to the aid received. This undoubtedly would have had an impact on the development indicators. Therefore, the second part of this paper will seek to establish to what extent the support provided by economic aid has directly impacted the development indicators.

Attempt to analyse the effectiveness of the support provided by economic aid to the countries chosen for this study

The intention for this second part of the paper was to attempt to analyse the effectiveness of the programs and initiatives implemented by the economic funding and the outcome on the key development indicators.

Trying to understand whether aid received has directly caused the correlation or lack of correlation in the development indicators is pertinent as donor country's must evaluate the extent to which their

donations are making a noticeable impact on the recipient country of if the money would be more effectively spent in a different way to aid development.

However, this has proven difficult as the literature on this analysis had proven incredibly sparse and there are limited case study examples of the implementation of this aid. For the amount of aid received by BRIC country's, there is substantially less documentation of the utilisation of this aid and the outcomes realised. With this lack of data, it became increasingly challenging to appropriately answer this question and provide a reliable conclusion as to whether the aid received had a direct impact on the correlation or whether it was just coincidental.

While there were a few case studies for each region, there is no utility in thoroughly analysing these because even when comprehensively analysing these cases a representative conclusion cannot be made. For example, India received up to US\$3.4 billion of aid during this time period yet the individual case studies account for only a fraction of this economic funding such as the Swachh Bharat mission only cost US\$156 million- a small fraction of the aid. Therefore, while a case study will provide an example of how a fraction of the aid has been utilised, adding further case studies to this paper will not mitigate or address the fact that there is not enough data in the public domain to be representative of these country's and therefore impossible to answer this question accurately. As a result, only one case study will be thoroughly analysed for each region.

Brazil:

CS: Brazil Healthcare Systems

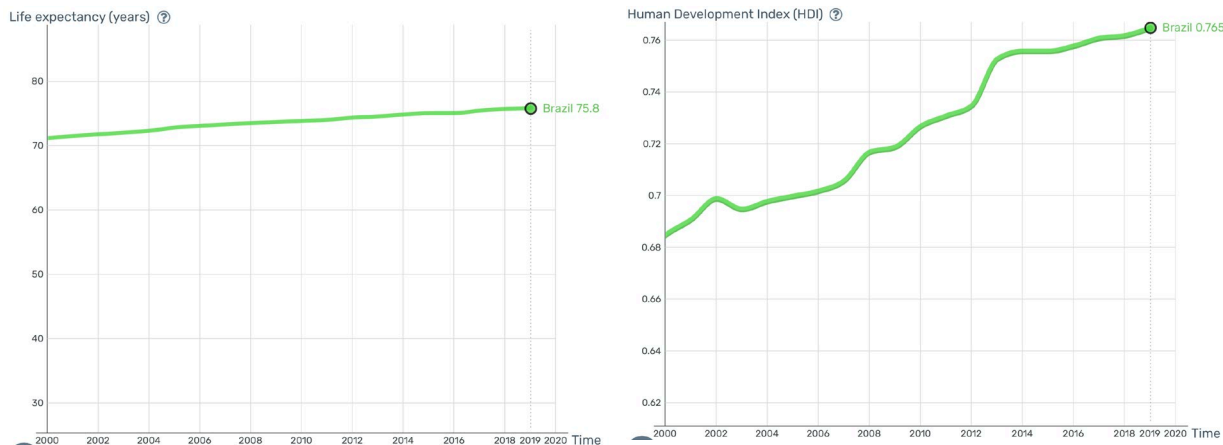
A nationwide initiative for enhancing primary care access and quality was established by the Ministry of Health in 2011. Nearly 39,000 family health teams participated in the initiative, despite being voluntary. (Tikkanen, Osborn, Mossialos, Djordjevic, & Watson, 2020)

In order to encourage the development of care quality, the Brazilian Accreditation System was established for the hospital sector in the late 1990s. Hospital certification is mostly governed by the National Accreditation Organisation. A 2009 study found that many authorised hospitals in Southeast Brazil were private, had more than 150 beds, and were located there. In accordance with a patient's medical requirements, SUS also provides home care services. (Tikkanen, Osborn, Mossialos, Djordjevic, & Watson, 2020) The family health team can see patients who are less difficult. 831 home care teams operated in 241 municipalities nationwide in 2019. 30 to 60 patients can be handled by each team. (Tikkanen, Osborn, Mossialos, Djordjevic, & Watson, 2020)

To protect indigenous health, priorities include adhering to customary medical procedures and implementing cleanliness measures. There are over 820,000 indigenous people in Brazil, living in about 5,400 settlements (12.6 percent of Brazilian territory). This scheme was promoted by (Tikkanen, Osborn, Mossialos, Djordjevic, & Watson, 2020);

- Regional regulatory centres coordinate patient referrals to outpatient specialised, hospital, and emergency services.
- Guidelines for organising health care networks have been published by the Ministry of Health.

- Financial incentives, care guidelines, and care pathways encourage the coordination of mental health care, emergency care, maternal care, and care for people with disabilities, chronic diseases, and cancer.



The graphs above have been discussed previously, but they illustrate how the years of life expectancy have increased since the year 2000. However, the increase of four years is incredibly steady which brings into question how effective one particular intervention has been. The graph on the right, shows that the HDI growth from 2000 to 2019 is from around 0.6825 to 0.765. The focus on Brazil's healthcare system may be to account for the growth in lifespan statistics. As more people live longer, the level of education and GNI per capita also rise as a result.

The analysis shows that Brazil's government was able to offer medical treatment across the country, and anybody who chooses public healthcare has access to this service, demonstrating the effectiveness of the funds spent on healthcare but this has not yet had a substantial improvement in life expectancy.

Russia:

As stated previously, due to a lack of data on the aid received in Russia, it would be inaccurate and unreliable to analyse any case studies of implementation of aid in Russia.

India:

CS: Swachh Bharat

In 2014, India requested and received aid for the Swachh Bharat mission which aims to clean the streets, roads and infrastructure of the country. It is India's biggest ever cleanliness drive and has 3 million employees (ENVIS Centre on Hygiene, Sanitation, Sewage Treatment Systems and Technology, 2022). The relationship between cleanliness and better health has been propagated since the inception of the Swachh Bharat program as the transition of a polluted India to a clean and healthier India is vital. This is seen in data provided by the Global Health Observatory:

1. Safe sanitation conditions have proved to prolong life expectancy among children as in the two years since the program was launched diarrhoea deaths of children have come down from 13% in 2014 to 9% in 2016. (Banega Swasth India, 2018).
2. In 1990, deaths due to unsafe water and sanitation consisted of 13% of total deaths (Banega Swasth India, 2018).
- 3.

Though the decrease is significant, it is still relatively high in comparison to other countries in the world and further improvements should be targeted in order to see significant improvements in social development. For example, the burden of child and malnutrition is 12 times higher per person than that of China. As per the 2017 Health Survey, even India's best performing state of Kerala had a per person disease burden 2.7 times higher than China, indicating major room for improvement (Banega Swasth India, 2018).

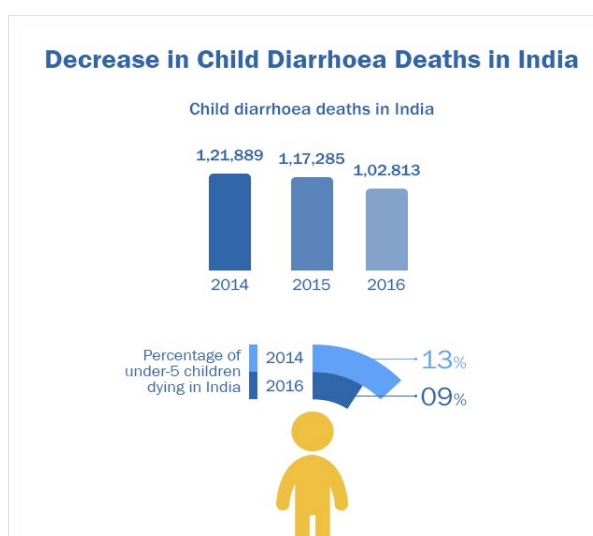
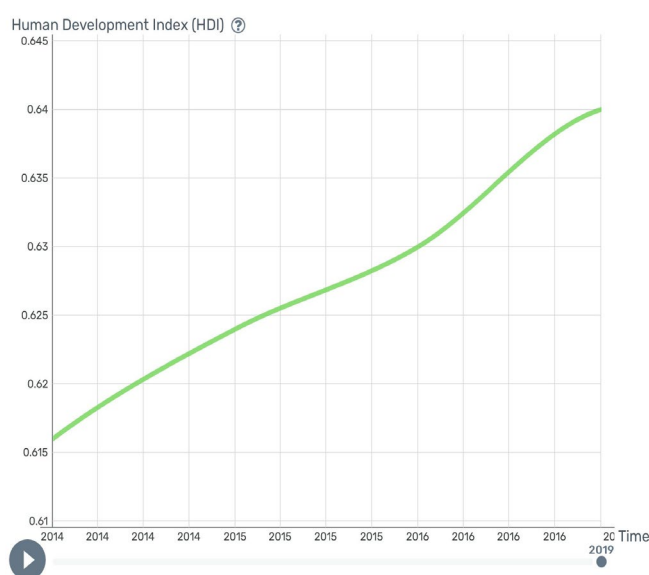


Figure 19: INDIA: Decreases in Diarrhoea Deaths in India. Global health observatory.

Nevertheless, there is an observed correlation between the increase of better sanitation in terms of a decrease in child diarrhoea deaths and consequential increase in life expectancy, and HDI. Between 2014 and 2016, Child diarrhoea deaths decreased from 13% to 9% and in this time frame, HDI increased from 0.609 to 0.624 as shown above. Also, India increased in rank from 130th to 131st in the world ranking of HDI.

However, it must be considered that this improvement in HDI can be due to other factors and a clearer and more representative picture on the true impact of Swachh Bharat Mission on improving the HDI of India will emerge if a comprehensive nationwide survey is conducted.

In conclusion, this lends to support the inference that an increase in aid received helped to improve the HDI of India, but this cannot be confirmed categorically.

China:

CS: National Impoverished Areas Compulsory Education Project

The "National Impoverished Areas Compulsory Education Project" was jointly executed by the Ministries of Education and Finance from 1995 to 2000. This was given as aid in the formation of a nine-year compulsory education system. In terms of, this aid was demonstrated by the eastern areas of China sending educators to the western regions to assist education, and as a by-product, international organisations have made it possible for the rest of the world to comprehend China better (Postiglione & Rosen, 2012)..

Over the past three decades, China has undergone such significant economic and social transformations. China's expertise in advancing education has been extensively disseminated to other developing countries by organisations like the World Bank and UNESCO.

With loans totalling US\$1.827 billion, China and the World Bank completed 21 educational loan projects. Higher education, fundamental education, regular education, technical vocational education, broadcasting education, and the creation of instructional materials were among the fields benefitted by these programmes (Postiglione & Rosen, 2012).

Over 100,000 secondary and primary schools, 156 secondary vocational schools, 21 secondary normal schools, 463 higher education institutions, and 57 publishers of educational resources benefited from the aid. Moreover, the academic credentials and skills learned of educators, as well as the management standards of educational administrations and institutions, have all seen improvements. The Chinese government had spoken highly about the project being implemented.

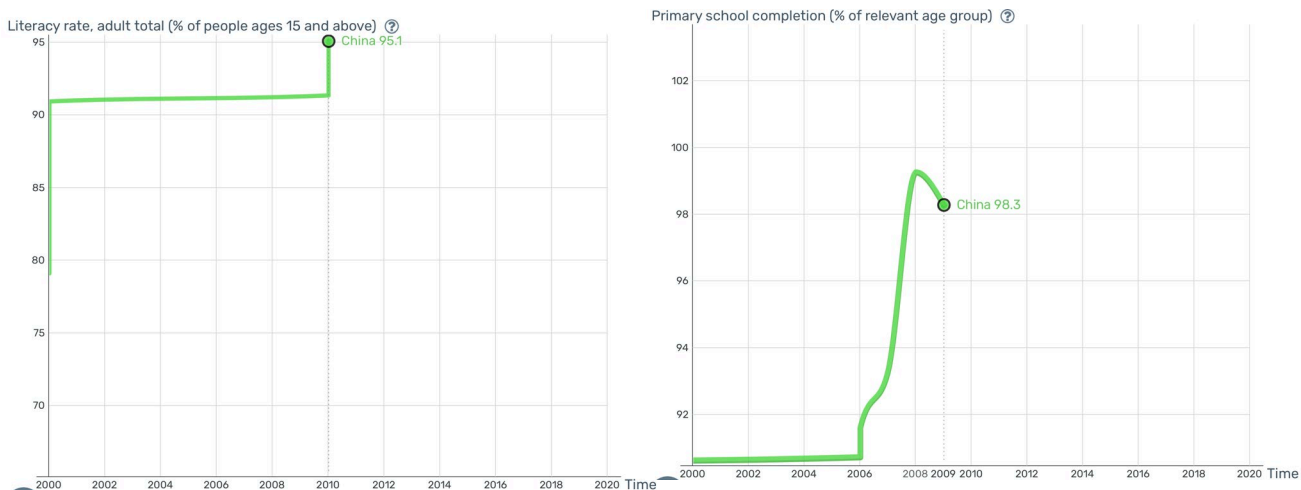


Figure 20: CHINA Primary School Completion (GapMinder, Primary School Completion (% of relevant age group), 2009))

From 2000 to 2009, the graph on the left which has been discussed previously demonstrates an upward overall trend in the percentage of adults over 15, who are literate. We can see that there was a vertical growth in 2000 from around 79 to 91 percent, which may have been caused by aid from international organisations that greatly aided the development of China's educational system. The percentage of people in the appropriate age groups who have finished elementary school has

increased from around 90.5 percent to 98.3 percent in Figure 17, which indicates that the population has benefitted from the establishment of 100,000 secondary and primary schools. Figure 17 shows the percentage of relevant age groups that have completed primary school and there's an increase in percentage from around 90.5% to 98.3%, which shows setting up 100,000 secondary and primary schools have benefited the population

In that, the emphasis has switched from higher education and secondary vocational education to general education and, in particular, basic education, the attributes of multilateral international help to China are comparable to those of the trend in the growth of international educational aid. During the 1990s, with the launch of four basic education initiatives spanning twelve provinces in western China, the focus of World Bank funds has switched toward promoting basic education in disadvantaged rural areas (Postiglione & Rosen, 2012).

Overall, the research shows that China's total aid of US\$1.827 billion has made significant advancements. It allowed China to establish very solid foundation systems throughout the provinces, which has had improved the education in the country, a key variable in improving GDP, GNI, HDI, Life expectancy and Literacy Rates.

Conclusion

The first section of this paper aimed to analyse the effect that economic aid had on the indicators for development. For Brazil and India, there seemed to be a positive correlation between aid received and most of the development indicators, suggesting that aid received did have a positive impact on development. Due to a lack of data, no correlation was found for Russia and it was removed from the analysis. China was the only country where the amount of aid received showed a decreasing trend whilst the development indicators increased, portraying a negative correlation between aid received and indicators of development. This could be because aid received in China before 2000 had its positive effect and now China is self-sufficient and no longer relies on aid to help its development. In this way, China is ahead in terms of development compares to the other BRIC countries.

The second section of this paper aimed to analyse the effectiveness that aid received had on the indicators of development and whether the improvement in development indicators was a direct impact of this economic funding. However, this has proved inconclusive due to several different factors.

- The lack of literature and data that is available in the public domain on where and how the economic funding was implemented and the outcomes on development indicators.
- The severe lack of literature on the evaluation of the effectiveness of the spending.
- The large scale of the aid received means the in-depth analysis of each case study only represents a tiny fraction of the total aid received so is not representative and therefore limited in revealing the outcome on development indicators.



As a result of the culmination of these factors, there is not enough existing data or literature to categorically prove or disprove the inferences made in the first section of this paper and the question proposed in section two has proven inconclusive.

The is hugely problematic given the billions of dollars that are donated to the BRIC economies each year. More research must take place to determine if the money being donated from more developed countries to less developed countries is making a significant difference or if help should be provided in a different non-economic way.

Furthermore, it is extremely difficult to categorically attribute the changes in the indicators of development to aid received alone due to other activities and events simultaneously taking place. Therefore, it is recommended that more research must be conducted in order to discover to what extent the aid received actually contributed to the increase in development indicators.



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