Growing Inequality in the People’s Republic of China: Dimensions and Solutions

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Abstract

This article examines the current state of inequality in China through a variety of lenses. Following the establishment of the People’s Republic of China (PRC) by the Chinese Communist Party in 1949, China reduced inequalities during the subsequent decades. However, after transitioning to a market-based economy, which started in 1978, under the leadership of Deng Xiaoping and subsequent very high economic growth, China has become one of the most unequal countries in the world in numerous aspects such as income, opportunities like getting higher education, and healthcare. This article looks at some of the dimensions and reasons for these inequalities and explains some possible remedies.

I. Introduction

Widespread inequality is a problem that has been affecting human society throughout history and today it continues especially in developing countries. In September 2015, all 193 Member States of the United Nations adopted the Sustainable Development Goals (SDGs), a set of 17 goals to end global poverty, build a life of dignity for all and leave no one behind. SDG 10, which is entitled “Reduce Inequality Within and Among Countries” states that its goal is to reduce things such as income inequality, ensure people have equal opportunity, and enhance representation in decision-making processes for common citizens.\(^1\) All 17 SDGs are supposed to be achieved by 2030.

As detailed in Jain-Chandra et al. (2018), the People’s Republic of China (PRC, henceforth China) has seen rapid economic growth for the last 20 years, leading to a large increase in income inequality. In addition, China has also experienced inequality in its healthcare system with a specific emphasis on disparities based on geographic location as well as the wealth of citizens seeking different types of care. Geographic inequality can also be applied to education in China, where educational systems in rural areas have less students attending college as well as less qualified teachers than their urban counterparts. Although education and healthcare in China do experience inequality, there are successes in both these areas as well, with, for example, the hospital sector showing little inequality and a nearly 100 percent primary school enrollment.\(^2\)

This article focuses on these previously stated inequalities as well as China’s successes. Following this introduction (Section I), Section II gives an overview of the research that has been done on these topics in China. Section III provides some socio-economic background to better understand

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the changes China experienced during the last few decades in terms of GDP per capita, life expectancy, and literacy rates. Section IV offers a detailed discussion on various dimensions and evolutions of China’s inequality. A brief conclusion makes some final comments and provides some possible improvements.

II. Literature Review

There is a great amount of literature on inequalities in China, with an abundant number of sources focusing on the huge income inequality the country is facing. Xie (2016) provides an overview of inequality in China. Zhang et al. (2017) dives into the inequalities faced by health services in China while Gao (2014) discusses China’s growing education gap. Jain-Chandra et al. (2018) and Li et al. (2014) discuss the growth of income inequality in the country. The following are short summaries of these publications in chronological order.

- Gao (2014) describes the growing education gap in China. Gao describes the state education system which offers nine years of schooling as well as college entry that is based on exam scores only. Although described as an example for education equity the expansion of basic education has led to discrimination against the less wealthy and well-connected members of China’s society. Students in rural areas are thus at a significant disadvantage compared to their urban counterparts.

- Li et al. (2014) focuses on income inequality as well as distributional effects of inequality. The article highlights how income inequality was not caused by declining incomes of poorer populations but rather a sharp growth in incomes of the rich. It also highlights the income gap between urban and rural groups. Lie et al. (2014) also explains how income inequality derived from assets is greatly influencing the inequality gap.

- Xie (2016) begins with explaining how China is transforming socially and then describes how these aspects are affecting inequality as a whole. Xie then describes how Chinese culture sees merit-based inequality as well as inequality in general as necessary for development of the country, both economically and socially. This article highlights the deep routes that run through inequality in China all the way back to ancient times. How the poor accepted the rich acting on their behalf in order for them to benefit in different ways such as improving their performance and becoming part of the rich. Xie ends with illustrating how people have gone from relatively poor and equal to being largely unequally in terms of income as economic growth in China has prospered.

- Zhang et al. (2017) discusses the different types of health services in China such as hospitals and primary care institutions and how equal they are. The article uses Gini coefficients to survey inequality in various parts of the different health services. Their findings show a decent equality within health institutions. However, regional inequality between rural and urban health institutions was high.

- Jain-Chandra et al. (2018) explores inequality, particularly income inequality, in China. They discuss how China has become one of the most unequal countries in the world since 1990, surpassing many countries in Latin American and Sub-Saharan Africa. Although there has been a leveling off in recent years, the inequality is still immense. Inequality also exists in opportunities such as access to education, health and financial services. Jain-Chandra et al. (2018) highlights how China is still behind other major economies in the
amount of borrowing and other transaction services provided by its financial sector. Jain-Chandra et al. (2018) then makes recommendations on how China can further decrease inequality, mainly through public spending and policies to reduce it.

III. Socio-Economic Background

This section provides some socio-economic background of China by reviewing the evolution of GDP per capita, life expectancy at birth, and literacy rate, which are all also compared to the average middle-income country (MIC) in order to get a better understanding of the changes in China.

Figure 1 shows the purchasing power parity (PPP)-adjusted GDP per capita of China and the average MIC in constant 2011 international dollars from 1990-2016. In 1990, China’s GDP per capita was $1,526, which has been $2,940 below that of the average middle-income country. However, due to China’s very high growth rate, it caught up with the average MIC in 2008. In 2016, China’s GDP per capita was $14,399 (more than nine times its 1990 value) and a solid $3,726 above that of the average MIC. However, in terms of GDP per capita, China still has a long time to go to catch up with the high-income countries (HICs), who had an average GDP per capita of $43,351 (again PPP-adjusted and in constant 2011 dollar) in 2016.3

Figure 1: GDP per capita, PPP (constant 2011 international dollar) from 1990-2016

Source: Created by author based on World Bank (2018).

Figure 2 shows the life expectancy at birth in years for both China and the average MIC from 1970 to 2016. Though China’s GDP per capita was below that of the average MIC until 2008, China always had a higher life expectancy at birth than the average MIC. Not only was it always higher, the gap has slightly increased from 3.1 years in 1970 to 4.9 years in 2016. The biggest gap between China and the average MIC actually was in 1983, when Chinese life expectancy surpassed that of the average MIC by 5.8 years. The gap narrowed a bit from 1983 to 1997, after which it increased

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again from 1997 to 2005 (when the difference was 5.7 years). The gap then declined very moderately to 4.9 years in 2016. In any case, China and the average MIC have seen significant improvements in their life expectancy. China’s life expectancy increased by 29.0 percent from 1970 to 2016, while that of the average MIC increased by 27.5 percent during the same period. Despite the progress, as it was the case for GDP per capita, China still lags considerably behind the life expectancy of the average HIC, which was at 80.5 years in 2016.  

Figure 2: Life expectancy at birth (years) from 1970-2016

![Life expectancy at birth](image)

Source: Created by author based on World Bank (2018).

Figure 3 shows the literacy rates for all years such data is available for China: 1982, 1990, 2000, and 2010. It shows that China’s literacy rate was only marginally higher than that of the average MIC in 1982 (65.5 percent for China versus 64.3 percent for the average MIC). However, China has made more progress than the average MIC from 1982 until 2000, when China’s total adult literacy rate surpassed that of the average MIC by 11.6 percentage points. From 2000 to 2010, the progress in increasing literacy rates was the same between China and the average MIC. In 2016, China’s literacy rate stood at 95.1 percent, while it reached 83.6 percent in the average MIC. In terms of literacy rates for youth (those between ages 15-24 years), China has reached universal literacy, with a youth literacy rate of 99.6 percent in 2016.  

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IV. Inequality in Income, Education, and Health Care

The following discussion will identify the causes for the different inequalities China is currently experiencing as well as offer some possible solutions and consequences of changes that could occur. Given the very limited data available on China’s inequality in the World Bank’s World Development Indicators database (World Bank, 2018), I will rely mostly on examining graphs and tables from the literature. I will focus my discussion on a) income inequality, b) education inequality, and c) healthcare inequality.

IV.1. Income Inequality

One of the most important assets in order to further one’s success in life is income because having a greater income typically provides better opportunities. Income has increased massively for most people in China. However, China has also seen an extremely large gap growing in regards to income due to its explosive economic growth over the past two decades. Xie and Zhou (2014, p. 6930) state that the “parallel increasing trends in China’s recent past have caused a large portion of ordinary Chinese to think that an increase in income inequality automatically accompanies economic development and thus is a necessary price for economic growth.” There are ways to thrive economically though that do not involve the country growing to the most unequal it has been in years.

Figures 4 and 5 compare the income inequality in China to major geographical regions and country groups of the world. Figure 4 shows the levels of income inequality across regions in 2015, Figure 5 shows the changes in the Gini Index across regions since 1990. As can be seen from Figure 4, in 2015, China had a Gini coefficient of 50 points, which is higher than any of the world’s regions.
(though some countries within those regions still have higher levels of inequality).\textsuperscript{6} Comparing it to Latin America and the Caribbean as well as Sub-Saharan Africa, two places which have a long history of inequality, it can be seen that China has surpassed both of these regional averages in income inequality, hence showing the degree of income inequality China has been reaching.

\textbf{Figure 4: Comparison of Income Inequality Levels}

![Comparison of Income Inequality Levels](image)

(Net Gini Index; in Gini points; year of 2015 (or latest available); average across the region)

Source: Jain-Chandra et al. (2018), p. 4, Figure 1.

Figure 5 depicts the change in Gini coefficient since 1990 for China and other places around the world. Income inequality has increased in China and many regions/country groups, though not in three developing regions: Latin America and the Caribbean, Sub-Saharan Africa, and the Middle East and North Africa. China’s coefficient increased by a total of 15 points, double that of emerging and developing Europe, as well as tripled compared to Asia’s low-income countries (LICs). Although the income gap has expanded in China, income across the board has been increasing in China and “even the bottom 10 percent incomes rose by as much as 63 percent.”\textsuperscript{7} Using this statistic, it can be inferred that more people are earning livable incomes, however, the income gap has grown enormously since the richest 10 percent have also had their incomes more than double.\textsuperscript{8}

Another point of concern is the gap between urban and rural income in China. Li and Sicular (2014) use data from China’s National Bureau of Statistics (NBS) to calculate the ratio of average urban income per capita to average rural income per capita. They found that the urban-rural gap increased from urban per capita income being less than 3.0 times rural per capita income in the late 1990s to more than 3.3 times around 2007-2009.\textsuperscript{9} This is important because it shows that the

\textsuperscript{6} For comparison, based on World Bank (2018), Brazil’s Gini Index stood at 51.3 points in 2015, while that of South Africa was 63.4 points in 2011 (the last year such data is available for South Africa).
\textsuperscript{7} Jain-Chandra et al. (2018), p. 5.
\textsuperscript{8} Jain-Chandra et al. (2018).
\textsuperscript{9} Li and Sicular (2014), p. 10.
The degree of income inequality in China is also based on where someone is living. Being in an urban environment compared to rural leads to better opportunities for jobs and thus income as well.

**Figure 5: Comparison of Changes in Income Inequality since 1990**

It should be clarified that rural incomes have been growing in China; they are just not growing at the same rate as urban incomes. One of the reasons for this is due to differences in non-employment income, which makes up 40 percent of urban income but only 15 percent of rural income, leading to a disparity in total earnings between the two. A way to solve this would be to change government policies that have historically benefitted urban environments, to also support rural areas since, from an ethical point of view, both are equally important to the country. These gaps could be reduced if the government stepped in by creating policies that, for example, reduced urban-rural disparities in the near future. Overall, understanding income inequality first is important to furthering discussion on other inequality issues in China, especially as higher incomes typically lead to greater access to education and healthcare.

**IV.2. Education Inequality**

Education is an aspect of life that everyone should have access to in order to further their development and to have a better basis for future success. China’s public education system is “often hailed abroad as a paradigm for educational equity.” Equity in this case meaning everyone has equal access to the nine years of compulsory schooling that the government provides and that students are admitted to colleges based solely on exam scores. However, China’s education is not as perfect as the international community makes it out to be.

Figure 6 expands on the literacy rates shown in the socio-economic background section of this article, now depicting the literacy rate by gender. As can be seen in Figure 6, China’s literacy rates

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10 Li and Sicular (2014), p. 11.
11 Gao (2014), third paragraph.
have not always been equal with regards to gender. In 1982, males had a literacy rate of 79.2 percent whereas females only had a rate of 51.1 percent of the total population. Although by 2010 this gap had decreased to only 4.8 percentage points (males having a literacy rate of 97.5 percent and females having a rate of 92.7 percent) it still shows that females are being unfairly discriminated against in terms of literacy. Though there is still a significant gender gap in China for adult literacy, China had eliminated the gender gap for youth literacy by 2010.\textsuperscript{12} On the other hand, though strides have been made in literacy rates, there is still the underlying belief that a man’s life will be more productive than a woman’s life.

Figure 6: Literacy Rate by Gender

![Figure 6: Literacy Rate by Gender](image)

Source: Created by author based on World Bank (2018).

Figure 7 depicts the education gap by location by examining the percent of people enrolled in a tertiary institution out of the whole population who are of college age. From this graph it can be seen that Shanghai and Beijing (two of the largest urban centers in China) have enrollments of 70 percent and 60 percent, respectively as compared to places such as Gansu and Yunnan, which have 22 percent and 20 percent, respectively. This difference in enrollment is shocking, especially given China’s dedication to having an educated population. Furthermore, given that the universities in Beijing and Shanghai are typically more prestigious, this also means that college-age kids in the rural provinces of China will not receive the same opportunities after college as the ones graduating from urban areas. This idea is furthered with government-issued hukous (an inheritance-based household registration system), which prevent people from having access to public services like specific schools unless their household is registered in that city or region. As more people move to the urban cities, hukous are increasingly a restrictive factor, preventing migrant children from accessing useful life necessities particularly education.\textsuperscript{13} Students who hold hukous in urban areas have an average of 10.3 years of schooling, while those in rural areas have an average of only 6 years of schooling.\textsuperscript{14} This is a problem because it means that students in rural areas are not meeting

\textsuperscript{12} World Bank (2018).
\textsuperscript{13} Choi (2012).
\textsuperscript{14} Choi (2012).

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the previously mentioned mandatory nine years of schooling that the government requires. Therefore, the government is being discriminatory against their rural population even though it is stated by law that education is mandatory.

Figure 7: Percentage of People Enrolled in Tertiary Institutions by Location

<table>
<thead>
<tr>
<th>Location</th>
<th>Enrollment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanghai</td>
<td>70.0%</td>
</tr>
<tr>
<td>Beijing</td>
<td>60.0%</td>
</tr>
<tr>
<td>Tianjin</td>
<td>55.0%</td>
</tr>
<tr>
<td>Guangdong</td>
<td>28.0%</td>
</tr>
<tr>
<td>Shandong</td>
<td>28.0%</td>
</tr>
<tr>
<td>Hainan</td>
<td>24.5%</td>
</tr>
<tr>
<td>Heilong</td>
<td>23.7%</td>
</tr>
<tr>
<td>Gansu</td>
<td>22.0%</td>
</tr>
<tr>
<td>Yunnan</td>
<td>20.0%</td>
</tr>
<tr>
<td>Guangxi</td>
<td>19.0%</td>
</tr>
</tbody>
</table>

(out of the whole college-age population)

Source: Trivedi (2018), based on information provided by the Center for Strategic and International Studies, China Power Project.

Figure 8 adds to the discussion by showing the previously mentioned reasons for tertiary education completion gaps while also adding regional and wealth gaps as reasons. Although previously mentioned, this graph compares China to major emerging markets and major advanced economies. It can be seen that China has a regional gap of almost 50 percent compared to 30 percent in the other categories. This shows that China is well “ahead” of other countries such as Chile, Mexico, Canada, and France in terms of the gap between the region with the highest tertiary education completion and the one with the lowest.

In addition, the wealth gap follows along the same lines with China showing a 50 percent difference between the top and bottom quintile compared to the 30 percent of the major emerging markets and major advanced economies. Once again, this shows the drastic difference that China has when it comes to an education gap as well as showing again that income is a serious factor when it comes to access to opportunities. In order to change these things, China needs to commit to maintaining its promise for nine years of mandatory education across the entire country and attempt to control the wealth gap that occurs in large urban areas where people have better access to schooling. The government can also help with improving the quality of rural education at all levels.
Figure 8: Gaps in Tertiary Education Completion

(age 25-29, difference in percentage points)

Source: Jain-Chandra et al. (2018), Figure 7, p. 6.

IV.3. Healthcare Inequality

Healthcare is an essential service to human survival, providing for treatments of illness all the way to routine checkups. It is a human right that every government around the world needs to honor. China is relatively successful in achieving this idea with the majority of the population having “legal health care coverage, which is largely on account of the success of the New Rural Cooperative Medicare.” However, while coverage may be guaranteed by the law there are inequalities that still exist in regards to access to healthcare and how much money has to be spent on it in order to receive necessary care.

Figure 9 depicts the percentage of people who are having to spend 10 percent or more of their household income on out of pocket healthcare expenditures. As can be seen from the graph, this percentage has risen drastically from 1995 to 2007 (the first and last year such data is available). In 1995, 5.8 percent of the population spent 10 percent or more of their household income on out of pocket healthcare expenditures. However, only five years later (in 2000), the percentage has more than doubled to 12.2 percent. Another two years later, the percentage has increased even more in terms of absolute annual increases, with 16.6 percent of China’s population having to spend 10 percent or more of their household income on out of pocket healthcare expenditures. While the percentage continued to increase to 17.7 percent in 2017, at least the growth rate has declined. Still, in some cases, such as rural households, which have much lower incomes than their urban counterparts, this more than 10 percent of out-of-pocket payments for health care is a significant burden to bear.

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Figure 9: Percentage of people spending more than 10 percent of household consumption or income on out-of-pocket health care expenditure

Source: Calculated by author based on data for total population and the number of people spending more than 10 percent of household consumption or income on out-of-pocket health care expenditure as provided by World Bank (2018).

Table 1: Comparison of Eastern and Western Provinces Healthcare Resources

<table>
<thead>
<tr>
<th></th>
<th>11 Eastern Provinces or Municipalities</th>
<th>12 Western Provinces or Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health-care organizations</td>
<td>343,064</td>
<td>300,255</td>
</tr>
<tr>
<td>Public hospitals</td>
<td>4,904</td>
<td>4,023</td>
</tr>
<tr>
<td>Medical and health-care workers</td>
<td>3,950,917</td>
<td>2,374,321</td>
</tr>
<tr>
<td>Health-care workers per 1000 people</td>
<td>5.33</td>
<td>4.71</td>
</tr>
<tr>
<td>Workers in maternal and child-care services</td>
<td>115,842</td>
<td>78,311</td>
</tr>
<tr>
<td>Beds in health-care organizations</td>
<td>2,323,857</td>
<td>1,609,610</td>
</tr>
<tr>
<td>Annual expenditure on health-care per person</td>
<td>¥1,063.7 (£106.37)</td>
<td>¥513.8 (£51.38)</td>
</tr>
</tbody>
</table>

Source: Created by author based on Table 1 of Wang and Zeng (2015), who refer to Government of the People’s Republic of China (2013).

Table 1 compares the healthcare resources between eastern and western China through a variety of different data points. First it is important to point out that the eastern provinces house the larger urban centers, such as Beijing and Shanghai, compared to the western provinces, which are relatively rural. At first sight it is easy to see that western provinces are severely lacking in terms
of almost every category although this could be because of the population difference that may not be due to the recurring trend of rural being prioritized less than urban. Hence, annual expenditures on healthcare per person is a good way to see if there is equality in both geographic areas. The average expenditure in eastern provinces is 1063.7 yuan, whereas in western provinces it is only 513.8 yuan, showing a huge disparity.

This once again shows that the government is spending less on its rural citizens than its urban citizens, this time in terms of healthcare. Zhang et al. (2017, p. 16) further explains this by stating that “the Gini coefficients exceeded 0.7 in the geographic distributions of institutions, health workers and beds in both the hospital and the primary care sectors, indicating high levels of inequality.” A Gini coefficient this high explains how the eastern provinces are having a higher number of health institutions, health workers, as well as beds for treatment than their western counterparts, showing the increasing regional disparities that are occurring despite healthcare once again being guaranteed to all citizens.

Changes can come in a variety of different ways but the first needs to be in spending per person. China will always have disparities in healthcare so long as their western citizens do not have the same amount of money spent on them as their eastern counterparts. By leveling spending so that all people are getting the same amount, it will help to also reform the other aspects so that everyone is receiving closer to equal care.

V. Conclusion

Although the task of fighting inequality in a country so large and expansive such as China may seem like a daunting task, it needs to be dealt with because people should not be living at such a huge disadvantage. If not necessarily in terms of income, the Chinese people deserve at least an equal opportunity to healthcare and education. Furthermore, the income gap needs to be reduced.

Xie (2016, p. 345) concluded that “many Chinese today find inequality acceptable” because they think it will further the country as a whole. However, an Oxfam (2014) report has shown that the extreme inequality China is facing today is rather hurting than supporting economic growth. There are ways for a country’s citizens to be more equal while still having a booming economy.

China first needs to lower the income gap by creating policies that will further the rural population while slowing the upper ten percent’s explosive income. Second, it needs to guarantee its commitment to giving nine years of education and not discriminate based on where someone was born or lived their life. Finally, a person’s healthcare access, an essential human right, should not be discriminated against based on their location and needs to be guaranteed for all through policy. By doing these things, China can commit to becoming once again a more equal society. Furthermore, it can show the world that it does care for all its citizens.

References

Choi, Kristy (2012). Education Inequality in China. World Outlook Dartmouth Journal of International Affairs (October 24, 2012); available at:
https://sites.dartmouth.edu/worldoutlook/2012/10/24/education-inequality-in-china/.


