

# Potential Impact of Covid-19 Pandemic on Poverty Reduction in China

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**Abstract:** Before the outbreak of the Covid-19 pandemic, poverty alleviation in China was steadily progressing. However, the pandemic led to reductions in both aggregate demand and aggregate supply, posing new challenges to poverty alleviation efforts. Moreover, the pandemic also exacerbated burdens on health care systems serving areas of lower socioeconomic status. The government should adopt expansionary policies to offset the effects of Covid-19 on poverty reduction.

**Keywords:** Poverty Alleviation, Covid-19 Pandemic, Government Policy

## 1. Introduction

The Covid-19 pandemic has posed great challenges to both individual health and Chinese economic development, especially in terms of poverty alleviation. Poverty alleviation in China involves three primary dimensions: income level, living standards, and social welfare. According to the PEST analysis in Figure 1, before the outbreak of Covid-19, poverty alleviation in China steadily progressing through active policy encouragement. Simultaneous economic growth has led to both technological and societal advancement, offering a stable foundation for the implementation of poverty alleviation, until the onset of the pandemic. This paper will discuss the potential impact of Covid-19 on China's poverty alleviation efforts from the perspective of macroeconomic theory, and will provide feasible policy suggestions.

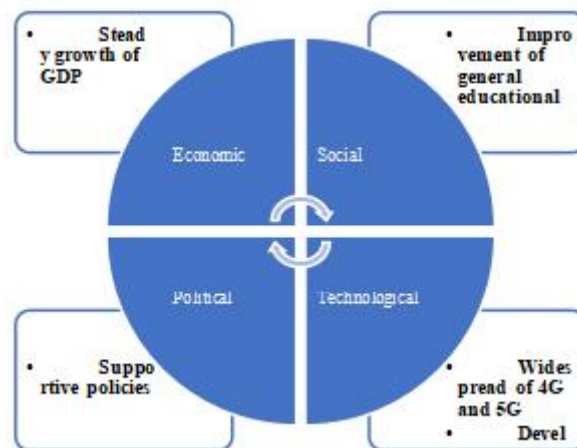


Figure 1: Macro environment analysis of poverty alleviation

## 2. Background

Reducing poverty and inequality is a key method for enhancing general welfare and social allocative efficiency. Hence, the United Nations set it as the first goal to meet in 2030 to achieve sustainable development. Previous studies have highlighted the dominant influence of human knowledge and innovation in economic growth. Enhanced investment in education can thus help lift individuals out of poverty. However, poverty alleviation requires multi-dimensional evaluation and cooperation from different parts of society. Different countries also adopt different policies according to unique national conditions. The effects of economic development and government policy on poverty reduction have been radically different in Brazil, China, and India. Brazil achieved significant poverty reduction through government policies targeted towards rural populations, but was unable to stimulate general

economic growth. India achieved economic growth without successfully decreasing the poverty rate, due to a lack of government policy and an increased rural-urban gap. China has reduced poverty, but rural economic growth has not been evenly distributed geographically. Hence, social planners must consider the discrepancies between rural areas and adopt policies tailored towards local situations.

### 3. Analysis

The proposed analysis is based on aggregate demand and aggregate supply theory, and fundamentals of health care systems. Aggregate demand is the sum of consumption, investment, government spending and net exports, which can be described by the formula:  $AD = C + I + G + NX$ . The Covid-19 pandemic significantly affected consumption and government spending. During the first quarter of 2020, when the spread of Covid-19 had reached its peak, quarter-on-quarter GDP growth rate decreased to -10.3%, implying that poorer individuals were more likely to receive decreased earnings and have higher risk of unemployment. In a survey study, when asked about changes in household savings and consumption, more than half of the interviewees chose to save more and consume less. Figure 2 shows the change in consumption spending caused by Covid-19. The slope of the pandemic curve is lower than that of the pre-pandemic curve, which implies a decrease of marginal propensity to consume. Hence, when consumer confidence decreases drastically, individuals are more likely to save. The consumption function can be derived as  $C = A + MD$ , where A is autonomous spending, M is the marginal propensity to consume, and D is disposable income. Although autonomous spending increased due to the increased cost of necessities, the effect did not overcome the total decreases in marginal propensity to consume and disposable income, leading to an overall decrease in consumption. Demand for agriculture products and leather produced in poverty-stricken areas would decline, exacerbating already low incomes. Government public spending also fell by 5.7% in the first quarter. In many populous provinces, poverty-stricken people subsist on government subsidies, consigning millions to living below the poverty line.

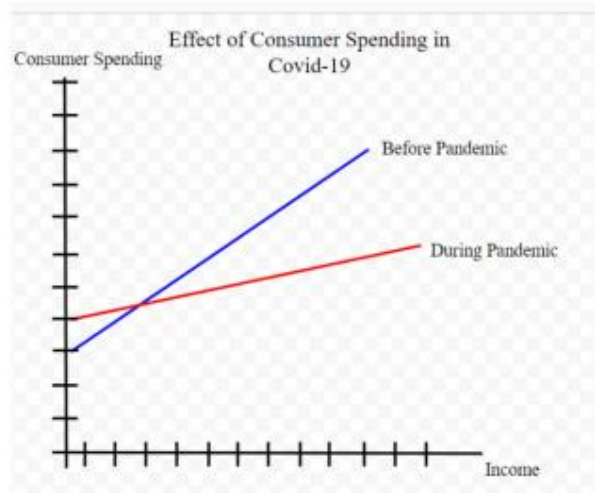


Figure 2: Change of consumption spending during Covid-19

In terms of aggregate supply, Covid-19 largely devastated the labor market and logistics. Quarantine policies and city lockdowns have greatly inconvenienced individuals employed across provinces and cities, especially people from poverty-stricken areas. Employment is widely regarded as the most important way to raise the income of rural households. The working population in poverty-stricken areas is higher than in others, so such areas have disproportionately faced risks to job security during the pandemic. Even workers in local government-led factories suffered high unemployment. For example, in Hubei province, around 90% of surveyed subjects lost their jobs, and about half of them did not receive any unemployment compensation. Hence, the Covid-19 pandemic severely reduced the income of non-agricultural populations in poverty-stricken areas. Similarly, the logistics industry was unable to provide normal freight services due to limitations including traffic controls and road blockades. Such obstacles led to higher prices for raw materials, which in turn imposed additional costs upon manufacturers. Considering the decline of demand, manufacturers opted to produce less output to control production costs. Thus, some workers were dismissed, again increasing the unemployment rate. According to Figure 3, the decrease of supply and demand shifts both curves to the left. In equilibrium, the total output level is lower than before. Therefore, the income level and living standard would decline in general, slowing down the process of poverty alleviation.

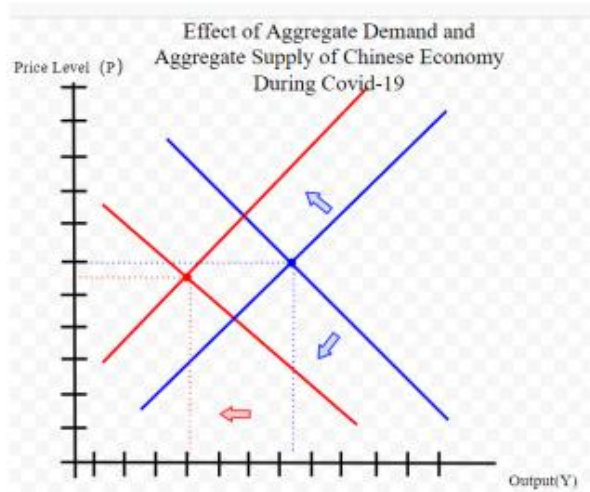


Figure 3: Change of aggregate demand and aggregate supply

From a health care perspective, medical resources in poor areas are often inadequate. However, the number of visits to rural hospitals and community health centres reached 2.03 billion, an increase of 110 million visits over the previous year. During the Covid-19 lockdown, the shortage of medical equipment and the lack of professional staff had a serious impact on the realization of pandemic prevention initiatives. Scarce healthcare resources and a surge in demand for healthcare services directly led to the poor spending more time travelling to medical appointments. High medical expenses are the top cause of poverty in China. A study on the poor ethnic minority population in Guizhou province showed that the poverty rate caused by catastrophic medical expenditures was as high as 57.03%. Although the low mobility of the population in poor areas caused a relatively lower infection rate, the overall increase in health care costs left patients in a more vulnerable state of poverty. Even after recovery, it may be difficult for them to return to the labor market quickly in the short term. Therefore, optimizing the distribution of healthcare resources in poor areas is an important task for modern social planners.

In response to the above effects, the government should pursue an expansionary monetary policy and fiscal policy. By increasing money supply, interest rates are lowered, attracting more investment opportunities. Moreover, local authorities can also introduce tax incentives to help small and medium-sized enterprises restore productivity, allowing the government to provide more subsidies and increase spending on poverty alleviation. The increase of investment and government spending may offset the decrease in aggregate demand. As Figure 4 shows, expansionary policy shifts aggregate demand back to the right, from  $AD_1$  to  $AD_2$ . Thus, in equilibrium, both total output levels and income levels increase. Additionally, it is essential to implement more flexible pandemic prevention policies in poor areas to reduce pressure on healthcare institutions and to avoid creating more employment difficulties for the poor. Providing healthcare related training programs for young people and increasing relevant job opportunities are additional possible solutions which could diversify health care resources and improve local employment.

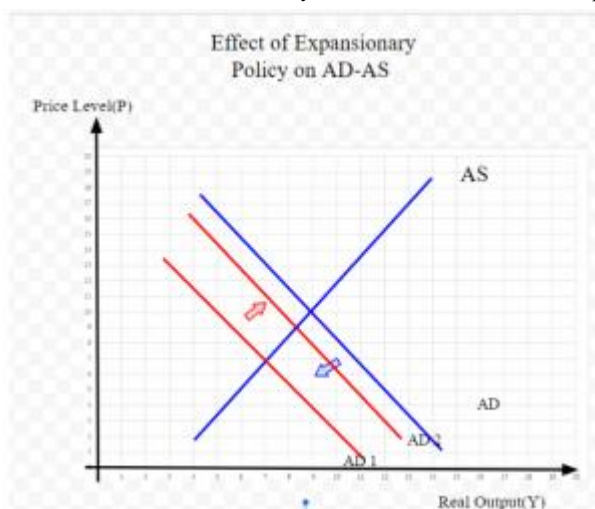


Figure 4: Effect of expansionary policies

## 4. Conclusion

This paper considers the impact of Covid-19 on China's poverty alleviation efforts. During the pandemic, the decrease in consumption and government spending caused a decline in aggregate demand. Pandemic policies also restricted logistics and worker mobility in poor areas, leading to a decline in aggregate supply. Finally, the larger gap between insufficient health care resources and growing demand for health care services exacerbated the poverty status among a significant proportion of poor people. This paper can be further applied to the settings of long-term and systematic poverty alleviation policy development, in considering the continued impacts of Covid-19 on economic development.

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