

Society Under the Newly Issued Double-Reduction Policy: a Review of the Short- and Long-Term Social, Economic, Educational, and Livelihood Impacts and the Comparisons with the Similar Educational Policies in South Korea

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Abstract. Along with the rapid global development, the course load of primary and secondary school students increases proportionally as well as the time input of students on their studies. The workload from school and the after-school tutoring burden the students at the compulsory education stage just to gain better resources for future education. Thus, they lose a significant amount of their time which is supposed to be an opportunity for them to pursue their interests and discover their potential. More seriously, the overwhelming workload may also significantly affect their physical and mental health. Moreover, this “exploitation” of students can socially stimulate educational involution as well, decreasing fertility desire due to the difficulty of raising children. Under this background, the Chinese government issued the Double Burden Reduction Policy to reduce students' workload from school and outside studying. The policy aims to cool down and avoid overheated social involution through the partial closure of out-school tutoring as a primary means. This paper analyzes these existing short-term effects and gives probable predictions of long-term impacts.

Keywords: Double reduction policy; Elementary and secondary school students' education; Korean education.

1. Introduction

After several reforms and adjustments, China's education system has gradually tended to select academic excellence—the high school entrance examination for all students in China—to ensure that every student has the equal opportunity to gain access to high-quality educational resources through hard work. Data from the China Statistical Yearbook of 2021 (shown in Figure I.1) compiled by the National Bureau of Statistics of China indicate that there has been a continuous increase in the number of students who decided to pursue a higher and better education level, such as high schools or colleges in recent five years. However, due to the vast population base and the minimal high-quality educational resources (which everyone strives for), this mechanism not only protects everyone's equal access to a better education but also stimulates society to involute a certain extent: A large number of K12 students get higher scores in the exams through after-school tutoring training and are counted in better high schools or colleges. This trend of social involution also catalyzes the vigorous development of the after-school education and training industry in the recent decade.

Number of Students Enrolled (in 10,000)					
General College	85.6	556.1	3031.5	3285.3	3838.0
Middle School	1553.1	1201.3	2414.3	2494.5	160.6
General High School	4995.2	6256.3	4827.1	4914.1	98.4

Fig. 1 The labels on the side: (from the top to the bottom) Total student enrollments (ten thousand people); General undergraduate; High school; Middle School. The tendency of gradually increasing student enrollments in the recent five years is shown above. Data from the website of the National Bureau of Statistics of China, the China Statistical Yearbook of 2021.

Before the formal introduction of the Double Reduction policy, China's education industry has been in a stage where it is flourishing. With the increasing number of educated students in schools,

the number of extracurricular teaching and training institutions has also been increasing, the number of teachers enrolled has also been growing, and the market has expanded accordingly. Before the government promulgated the double reduction policy, the education industry had already surpassed the real estate and Internet employment ranking. It is also essential for China's economy's education and training industry. Among them, extracurricular tutoring classes are central to family education expenditure. According to the 2019 report, family education expenditure in the primary education stage is an integral part of the country's total education investment, which accounted for 2.48% of the GDP in 2016. While the education and training industry promotes China's economic development, shadow education also leads to society's involution. Due to the highly limited educational resources, parents try to help their children get better grades through off-school tutoring institutions and thus obtain more high-quality educational resources. The 2017 China Institute for Educational Finance Research-Household Survey, conducted by the Institute of Educational Finance of Peking University as a portion of China Family Panel Studies, showed that the total participation rate of extracurricular tutoring for primary education students nationwide was 47.2% (Graph I.2). This means that nearly half of the students in the primary education stage participated in the ranks of extracurricular tutoring. Attending outside tutoring has become a common phenomenon occurring in almost every household with students, and it has also developed into a considerable portion of people's daily life. With the fastening and the heating-up of the involution, more and more unwillingness to get married or have children have appeared in society, especially in which having more children means enduring more burden for a family. Demographic-statistical data have shown that in the year 2020, the natality rate of China has reached its lowest level- 8.52%- for the first time in Chinese History since 1978 that it dropped below 10%. Combined with a regular mortality rate, the natural population growth rate reached its historically lowest point since 1978: only 1.45%.

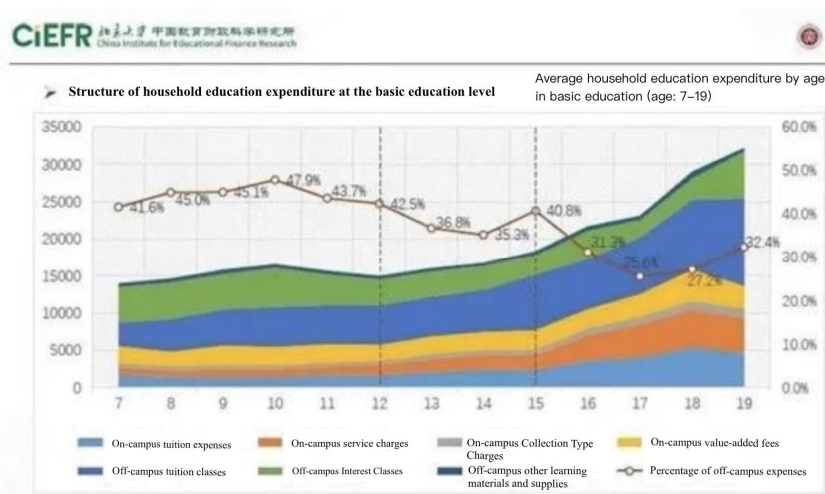


Fig. 2 This graph shows the structure of family education expenditure in the primary education stage. In this graph, the areas colored blue (sky blue), green, and dark blue are the expenditures households would spend on outside school services and goods. In contrast, the other areas represent the school's expenditures on services and interests. The dotted curve demonstrates the proportion of the former over the total household educational spending. Graph and data from the CIEFR website, China Institute for Educational Finance Research, C. I. E. F. R.-C. I. for E. F. R. (2021, April 19).

China Institute for Educational Finance Research-Household Survey (CIEFR-HS). Peking University Open Research Data Platform. Retrieved January 27, 2022, from <https://opendata.pku.edu.cn/dataset.xhtml?persistentId=doi%3A10.18170%2FDVN%2FKF1JYM>.

Aimed to solve this uprising social circumstance and avoid overheating involution, the Chinese government issued the Double-Reduction policy on July 21, 2021, requesting to reduce the workload of students in compulsory education and resolutely reduce subject-related off-campus training. Specific instructions include: asking the existing subject-based training institutions for students in

compulsory education to register as non-profit institutions uniformly; regulating online subject-based institutions to change into an approval system; prohibiting subject-based training institutions from going public for financing or capitalization; and banning tutoring institutes from taking up national legal holidays, rest days and winter and summer vacation periods to organize subject-based training. This policy has brought about various social-economic effects in just a few months. To address this issue, this paper focuses on reviewing and discussing the short-term and long-term impacts the policy would bring with the comparisons with some similar policies issued previously in South Korea.

2. Methods

2.1. Primary Resources of Data

Since this research focuses on discussing the social and economic impacts of the Double Reduction Policy, the method that this study applied to gain primary data is a social investigation or social survey. There are five categories of survey objectives: parents of K12 students, K12 students, K12 school teachers, previous tutors, and current tutors. The essential questions are focused on the change that the Double-Reduction Policy has made in their life and whether they feel that the policy has brought them positive or adverse effects. For the technical tool to complete the survey, Wenjuanxing, a Chinese website, is used to create and collect online surveys since more people have access to the website with its accessible features.

2.2. Secondary Resources of Data

The secondary research of this study concentrates on data collected from multiple websites, such as the financial pages of the education industry grants, the statistical data collected by the government, accumulative data from the world bank, and even news resources. Combined and compared with previous studies focused on related topics, this study reviewed the effects and impacts of the policy and made assumptions for future prediction.

2.3. Results of the Primary Survey

The questionnaire was distributed and collected for 14 days, with 30 results collected, of which 27 were usable and valid. The distribution of the respondents is shown in the table below (Graph R.1).

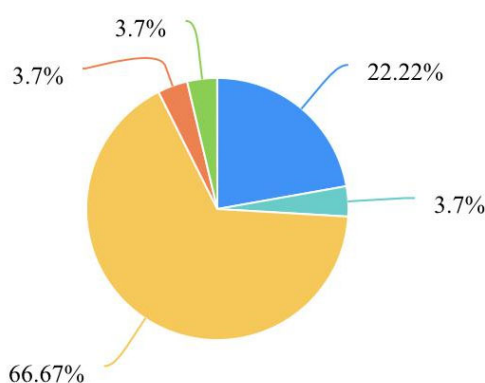


Fig. 3 The pie chart shows the distribution of the respondents: 66.67% are parents of K12 students, 22.22% are K12 students, and each 3.7% are K12 school teachers, previous tutors, and current tutors.

2.3.1 For the K12 students

Compared with the circumstances before the policy was issued, the students gained nearly more than half an hour per day on resting and particular time. Also, 83.33% of them use the extra time to do and learn something they are interested in. Furthermore, an average of 92% of the investigated students believe they can comprehend most of the materials taught in school without the help of

outside tutors. However, 66.67% of the students think they learned more academic knowledge before the policy was issued, with the rest feeling there is no significant change. And they have a relatively low level of self-satisfaction with only 45 out of 100.

2.3.2 For the school teachers

They spend relatively the same amount of time on their work, with about 9hrs per day. They think after the policy was issued, their students can only absorb 75% of whatever they teach in class, even though the teachers feel like there is more teaching work to do every day. They also have a relatively low score for their happiness level after the policy.

2.3.3 For the parents whose kids are K12 students

66.67% of the parents feel they have more time flexibility after the policy was issued, while the rest didn't feel much change. 61.11% believe that their children are learning better in school under the Double Reduction Policy, while the others don't, and the latter are planning to find accessible outside-school tutors to help their children. Parents have a higher score for their happiness level, which is, on average, 64/100.

2.3.4 For the previous teachers from tutoring agencies

Before the policy was issued, the outside-school tutors worked for about 10 hrs a day during weekends. For the future, nothing is pre-planned besides maybe doing some private tutoring. But this respondent stated that "it feels like theft" with a low happiness level: 23/100.

2.3.5 For the current tutors from tutoring agencies

The policy didn't change the working time length of the current tutors: still 10hrs per weekend day. Based on the students that the respondents taught, they cannot perceive if there is a clear improvement in student learning. And one of the respondents stated that they are afraid of being unemployed for now and only have a happiness level of 15/100.

2.4 Potential Errors and Means to Minimize the bias

As the primary resources of data, the sample size needs to expand to gain a more comprehensive result, especially in the categories with only 1-2 samples. The larger and more varied the sample size grows, the more accurate the data will reflect more representative results. For example, working with different schools of different levels in various regions across the country can be an accessible means to gain accurate results. However, because of the limited time and accessibility, the one used in this research is just a demonstration for further and continuous study.

In addition, due to the limitation and restrictions of Internet access, some of the official statistical data are not available. More access to various datasets would improve the accuracy of the research and provide a better understanding of the impacts of educational policies, such as the Double-Reduction policy.

Last but not least, there was not much post-reform statistical data collected during this research. So for future research, combined with more data collected after the policy issue, its effects and influences can be more obvious.

3. Discussion

3.1 Short-term effects

After the tremendous success of the outside school tutoring industry that lasted for nearly 20 years, it is facing its first significant downfall, which brings a cascade of social impacts and some economic downturn to a certain extent in a short time.

The double reduction policy stipulates that the teachers in the existing teaching and training institutions should have the corresponding qualification certificates. This trend resulted in millions of unqualified teaching staff being unemployed, laid off, and forced to change industries. Thus it led to

short-term frictional unemployment, which also impacts society since the demand for other positions rapidly increased.

At the same time, the impact of this policy on the education and training industry is also very significant: the two giants—Good Future and New Oriental—each their stocks dropped severely the following two days after the policy was issued and has remained dismally at this level even half a year later. The supply of the former dropped from 20.52 USD to 4.40 USD with an approximate decrease of 79%, while the latter experienced a decline from 6.40 USD to 1.94 USD with an estimated 70% reduction. In addition, Good Future's market capitalization evaporated \$9.362 billion, about RMB 60.7 billion; Highway(Gaotu)'s market capitalization evaporated \$1.554 billion, about RMB 10 billion; New Oriental's market capitalization evaporated \$5.949 billion, or about RMB 38.5 billion. In total, the market capitalization of the three companies evaporated by a total of RMB 109.2 billion around the day the policy was issued. Furthermore, Good Future has announced plans to stop compulsory subject training by the end of 2021, causing more than 20,000 people to be unemployed. The CEO of New Oriental, Minhong Yu, announced on his social media that in 2021, New Oriental's market value fell by 90%; revenue decreased by 80%; around 60,000 employees were dismissed; cash expenses such as tuition refunds and rental refunds for teaching locations were nearly \$20 billion. After this severe damage, most capable giants have changed their directions from outside school tutoring services to various types of investments, including adult continuing education, live commerce, financial assets, etc.

While these giant institutions are trying to find a new response method and development direction, many small and medium education and training institutions have faced or experienced collapse. As of September 1st, 2021, the number of cancellations or revocations of education and training-related enterprises exceeds 160,000, an increase of about 26.51% compared with the same period in 2020. About 150 days after applying the policy, nearly 70,000 education-related businesses were revoked and canceled nationwide, with an average of more than 465 per day. This decrease is a short but rapid shock to the overall economy.

Due to the COVID-19 pandemic that started at the beginning of 2020, though the GDP in China continuously grows, its growth rate has reached its lowest point in 2021, according to the statistical data (Graph D.1) from the World Bank. Also, based on the CPI data (Graph D.2), which demonstrates inclined inflation since it rises, combined with the decreased interest rate from 3.85% to 3.8%, this seems to be a valuable means to stimulate spending and make up the GDP.

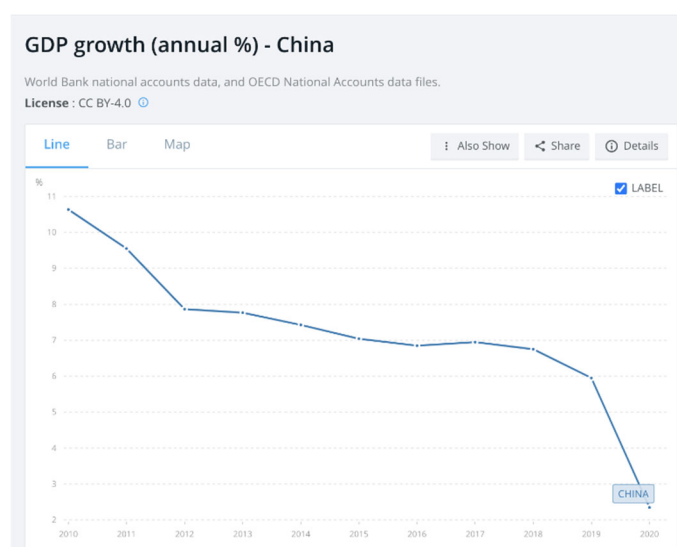


Fig. 4 The annual GDP growth rate of China. Graph resources: GDP growth annual % - China. Worldbank. (n.d.).

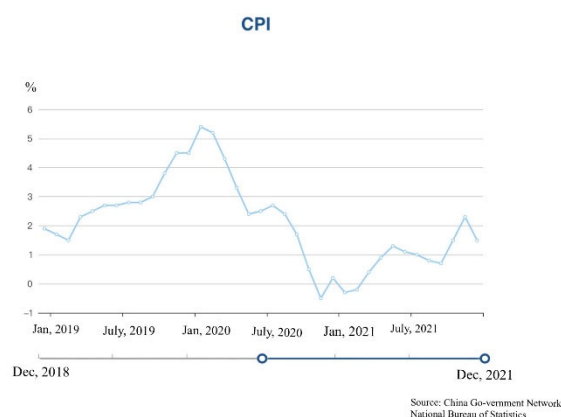


Fig. 5 China's CPI (Consumer price index) from January 2019 to December 2021. Graph and Data from the National Bureau of Statistics of China. (n.d.). CPI Graph. National Bureau of Statistics of China.

Under the restrictions, several social chaoses are also surfacing, as what happened to South Korea as mentioned above. According to several news reports, there are still various unqualified after-school tutoring institutions, even milk tea stores, to provide after-school tutoring to students, as the demand for after-school tutoring from parents and students still exists. In these illegal tutoring institutions, a cup of milk tea is sold for thousands of RMB because its price corresponds to the cost of a tutoring session. Due to the demand of the parents and students, plus the essence of means to gain access to better educational resources remains unchanged, the chaos caused by the policy needs to be mostly eliminated.

According to the social investigation, though through a small sample size, the study found that under the policy, most relevant people are not satisfied with their circumstances right now since their happiness levels are somehow low. And it is hard to distinguish the effects of students' learning since everyone's perception of it varies. So, to a certain extent, it is doubtful if the Double-Reduction policy can play its role in the short term.

Besides the research results, Beijing Normal University's China Institute of Education and Social Development released a report on the effectiveness of the national "double reduction" survey in the first quarter of 2022. According to the report, 75.3% of students feel that the amount of homework is less than last semester. Questionnaires and individual interviews were conducted on the "double reduction" reform. The questionnaire survey covered 213 districts and counties and 3,564 schools in 31 provinces, autonomous regions, and Xinjiang Construction Corps. The one-on-one interviews covered 105 principals and 316 parents in 12 provinces and 36 counties. The report also points out several policy limitations: teachers' ability to design high-quality homework needs to be improved; funding mechanisms for after-school services are not yet sound; there are still violations in out-of-school training institutions; teachers' work pressure and burden have increased, and parents' education expectations remain high as the previous.

Also, another problem that needs all of us to think about is gradually emerging is what might be the next industry to be limited by the government after the two significant restricting policies on the real estate industry and the educational industry.

3.2 Long-term Influence with Comparisons

Asian countries, especially East Asian countries (such as China, Japan, South Korea, and other countries that are developing rapidly in the world today), their education systems have shown a high-intensity and high-density competition for higher-quality educational resources. Challenging advanced education model: Students will receive education at the K-12 stage that does not match their age group. For example, many elementary school students preview a large part of junior high school content in the second half of elementary school. Therefore, the competition among students is

becoming more evident and fiercer, catalyzing the anxiety of parents and the pressure of the school, and ultimately drives the whole society to become involute.

3.3 Comparisons with Korea

Under similar social and economic conditions of high population density, scarcity of natural resources, and severe educational in-volume, South Korea started one of its burden-reduction policies in the 1970s. Because there was an urgent need for high-level human resources for social development, the awareness of prestigious schools induced educational involution and the social burden that triggered the government to reflect and reform its educational and economic system. The reform lasted for about 30 years, with the introduction of High School Equalization policies and the suppression and banning of out-of-school tutoring institutions. But as social controversies arose, the various forms of out-of-school training have never ceased in the dark, even forming a battle of wits and horns with the government. The policy ended up as a general failure, with "education for excellence" overturning "equalization education".

By the end of the 1990s, the ban on out-of-school training institutions was almost in name only, and almost all high school students were enrolled in remedial classes for extracurricular tutoring. In May 2000, Korea's Constitutional Court finally re-allowed out-of-school education and training on the grounds that the ban on tutoring violated students' right to education; the cost of private education in Korea rose to 20.4 trillion won in 2007.

In 2006, state education authorities restricted the operating hours of hagwon (private tutoring academies) to reduce the economic and time resources spent on tutoring. The issue with this policy is as South Korea has experienced rapid and unprecedented economic and social achievements since the 1960s and has grown to become the ninth-largest economy in the world with a GDP of US\$1.75 trillion and a per capita income of US\$34,569. However, some of its significant social problems began to reveal themselves: South Korea today has the highest suicide rate among the OECD nations, its divorce rate has soared, and the rate of fertility has declined to the lowest among OECD nations (OECD, 2017a; Statistics Korea, 2016). Besides this, more than half of middle-income households are cash flow-constrained, doubling household debt and a drastic drop in household savings rate (The Bank of Korea, 2017). According to the McKinsey Global Institute, the cause of these outcomes is broadly slowing wage growth combined with a dramatic increase in spending on housing and education (April 2013), including the overinvestment in private after-school tutoring programs. To solve these rising economic and social problems, the South Korean government issued the Hagwon Act to avoid overpopulation.

However, compared with the situation in China, they share some similarities in the policies' background and aim. After applying the procedure for years, related research is done to seek the effects of the policy. The findings suggest that enforcing the curfew did not significantly reduce the hours and resources spent on private tutoring. Also, demand for private tutoring seems to be especially inelastic for high school students, who increased their consumption of alternative forms of private tutoring. As the consumption of private tutoring positively correlates with academic performance and socioeconomic status, the curfew may harm the equality of educational opportunities.

Combined with the circumstances in South Korea, according to the review of the questionnaire results and recent news resources in China, for families who can still find help from alternative forms of outside tutoring, their children are still doing what they were doing before the policy was issued. In contrast, students from families who cannot find this resource or cannot afford other outside-school tutors are forced to quit the original resources that can help them learn more. Also, some of the tutoring agencies turned their tutoring period into weekdays instead of weekends since the latter option is banned now. Some might even alternate their stores and secretly serve tutoring services. This difference rapidly and significantly enlarges the difference between the students and is probably the same as the Hagwon Curfew, even intensifying the inequality of educational opportunity division.

The ultimate reason for these social changes that are related to educational reforms or shifts is this "cake-sharing" case: the limited amount of high-quality educational resources as a cake to be divided

by the large population base since east-Asian countries like China, Japan, and South Korea shares this similar condition. People who can and are willing to gain more access to the resources they want can acquire more resources through their operations, whereas others need to give some of them up due to the policies. This study predicts this intensified inequality between the different social strata in the short term. However, in a long time, as educational resources improve while the natural expectations of students on the education resources gradually go down, technology development and resource improvement will eventually equalize this inequality, and social involution will be cooled down as the “cake” will turn bigger to share.

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