The Relationship Between Individuals’ Expenditure and the Happiness Index Level in China

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ABSTRACT
The GDP per capita and household consumption increased fourfold between 1990 and 2005, and life satisfaction levels plummeted. Also, in the same year, China only ranked 86 out of 156 countries on the UN World Happiness Report placing below Russia and even war-torn Libya. Therefore, this paper will include problems that occurred in the housing, healthcare, and education industry with the analysis of corresponding government policies in raising the residents’ well-being and welfare. The solutions proposed by the government in the three industries have been implemented and have effectively alleviated the problem. However, in some cases, the happiness of residents has not been improved. Therefore, if we want to improve the residents’ happiness index, we need to coordinate in many ways to solve the problem fundamentally.

Keywords: “Double-Reduction” Policy, Disposable Income, Happiness Index

1. INTRODUCTION
Since the Chinese reform and opening up begins, the economy has been booming and helping China to become one of the largest economies in the world. However, if we compare the level of well-being for China and other countries, there is still a big gap in it, meaning that it is not in the line with the growth of the economy. Several factors cause this figure to be low, including the high cost of housing and health care, and the pressure on education. According to the National Bureau of Statistics, the population in China increased from 1266 million in 2000 to 1412 million in 2020, and the annual population growth rate decreased sharply from 1.07% to 0.53% in these 20 years. In addition, the prevalence of depression in China had increased by 24.7% since 1990, which reveals from another aspect that the well-being level in China is keep declining. Concerning the figure stated above, it is crucial to start setting policies to resolve the problem.

Easterlin et al. researched that in the long-term, an individual’s happiness will not increase with the growth of the economy in developed countries with the measurement of life satisfaction (LF) and financial satisfaction (FS) about the US and Latin American countries. In short term, happiness and income are positively related in an even wider range of studies. From the most rapid growth counties of China, Chile, and Korea in historical data, the doubling increase will not result in a greater increase of happiness. To understand more, the study on policy rather than individual such as health and life may lead to an answer to better understand the situation [1]. Liu researched that real estate is one of the most crucial factors affecting the happiness of Chinese residents. According to Mingqing, owning more real estate or larger houses can significantly raise residents’ happiness, but as the price of housing becomes higher, the happiness of individuals will be more difficult to increase. China is moving into a new level of development, that such detrimental effects could be restricting this development. The difference between this research and others is that it looks especially from the aspect of the impact of the increasing investment in real estate, directly verified the inhibitory effect on residents’ well-being [2]. He researched the significance and basic model of the bulk purchase of medical equipment and drugs, that the medical insurance department will purchase for patients and consumers. The enormous purchase will make the medical insurance department a monopoly buyer and the pharmaceutical company that won the bid will on the other hand monopolize the supply at a low price, which the larger the amount purchased, the lower the price will be. According to Hu, a fair price-the
affordable price for patients and health systems—will motivate pharmaceutical companies for further research and development leading to sustainable growth [3].

Ke et al. collected the data for 31 provinces in China to investigate the effects of real estate investment on national happiness. He concluded that the rapid growth of real estate investment has a significantly adverse impact on people’s happiness. More investment going to the real estate deteriorates the disposable income, consumption striction, and personal developments. China National Happiness continued to fall from 1990 to 2012 which was the period that the government encouraged real estate investment. The writer suggested curbing spectacular investment via loan preference, taxation on real estate, and making the housing back to its residential nature, then eliminating the inhibitory effect of real estate on national happiness [4]. Zhao determined the relationship between income, health, and residents’ well-being using the province Taiyuan in China as an example, that both factors have a positive relationship with the happiness of individuals either directly or indirectly. Income cannot only affect individuals only with its change in numbers but also affect individuals with the influence of their health conditions. She also raised that the impact of income on happiness will be weakened as the individual’s health condition deteriorates, and the impact of health on happiness will also decrease with the decline in income level, so the reform of the health care system needs to be achieved to improve the residents’ well-being in China [5]. According to Bemes et al., China experienced rapid economic growth in the past few decades which the world has witnessed. Therefore, China created a rapid rise in the middle-class population in the urban area with rocketing increases in income and spending power. The middle-class population created great productivity in the economy and also become the main consumers of the economy. The great needs from the expansion of the middle class in traffic, education, medical, etc. created treasonous opportunities to the world market. Businesses shall capture the trends and potentials of middle-class consumption to ensure most of the market share [6].

Li researched the factors affecting the residents’ well-being, including absolute income, relative income, and income disparity. He concluded that rich people usually have higher satisfaction and happiness than the poor and that there is a positive relationship between the rise in income and the increase in residents’ well-being, while there is a paradox between these two factors according to Easterlin. The positive effect of relative income on happiness is relatively low, which also shows that income has a ratchet effect on happiness. In addition to this, he also stated that residents’ well-being can be improved by government expenditures according to Tellaet [7]. The population’s well-being is defined by their income and wealth, but it has its limitation. Once the income and wealth reached a certain level, the increase of income and wealth will not lead to the rise of happiness that much. The other factors matter such as your neighborhood, your health, your family status, security, etc. The writer raised different opinions to the popular position regarding the decline of happiness for China. The writer indicates rising subjective well-being and a narrow gap of well-being between social groups in China. China’s government responses to policies and intervention related can improve the subjective well-being in certain contexts [8]. Wu included that as China is having a more important global status, the concern for house price bubbles in China in the future is increasing as well, so this problem can be a catastrophe for not only China but also the world. Wu then compared the performances of the three most common house price measurement methods for the new housing sector, and they found that a simple method of measurement without quality adjustment is biased. The current risk of mispricing in China’s real estate market is greater than reported by existing official indicators [9]. Hu revised that the status of house owner has a strong positive effect on the housing satisfaction and overall happiness of Chinese urban residents, and the subjective benefit of owning a house in big cities seems to be much smaller than that in small cities. He stated that the relationship between owning real estate and happiness is being under-researched. Owning houses can bring people confidence and self-esteem for example but will decrease their happiness if residents are having too much financial burden from owning this house and cause a negative effect to occur, and that it could also restrict individual’s mobility and freedom and further decreases the residents’ well-being [10].

In the rapidly developing China, two completely mismatched phenomena are happening at the same time: rising wages, consumption levels and declining happiness index. This article mainly explores the reasons for this phenomenon and the corresponding solutions and improvement methods to help China’s economic development enter the next important stage. This article will mainly discuss how the three main industries that account for the consumption of Chinese residents—housing, education, and medical care—have negatively affected the National Happiness Index, and how the Chinese government has introduced issues in the past two years to address various issues in various regions.

2. THE CURRENT SITUATION IN CHINA

The trend of rising housing prices in China has always been a problem since once housing prices fall, the high loans attracted by high housing prices will cause a great amount of bad debt to occur, and even may cause the financial crisis to occur, thereby affecting the global economy. The status of education has soared, and education expenditure has become the largest expenditure of most families except for houses. Although the education level in China has been improving, the
well-being level has not shown a corresponding trend. In addition, the increase in the prices of medicines and medical devices has increased the burden of medical expenses for patients year by year, and therefore, the government has implemented a centralized procurement policy to reduce such a burden for people.

2.1. Potential house price bubbles

China’s real estate industry has developed rapidly in the last decade as more and more investment flows into this market. In major Chinese cities such as Beijing, Shanghai, and Shenzhen, housing prices are approaching Western European levels. According to the calculation results, China’s housing market value accounted for 356% of GDP while the same figure was only 126% in the United States, 208% in Japan, 238% in Germany, 320% in the United Kingdom, and 341% in France.

The average unit price of real estate in Beijing has reached ¥65629 or even higher, the average price in Shanghai is ¥53066, and the average price in Shenzhen is about ¥60000. In contrast, the price situation in cities other than first-tier cities is relatively optimistic. For example, the average unit price of Jinan is only ¥20000 according to Countrywide Real Estate Database.

![Figure 1. House prices in different cities in China](image)

In the 1990s, before the real estate bubble burst in Japan, its housing market value accounted for 391% of GDP. In addition, at the end of 2010-2020, the ratio of real estate loans to GDP increased from 15.9% to 40.1%, which has surpassed the US subprime mortgage crisis. Although the capital structure of various countries is quite different, if we continue to let it develop, a crisis will also appear in front of us.

2.2. Invalid burden reduction for students

China has been reducing the burden for primary and secondary school students since 2018, including no written homework for first- and second-year students, no more than 60 minutes spent on homework for students from grades 3 to 6. The off-campus training institutions’ training progress cannot go ahead of the progress of the primary and middle schools in the same area.

The intention of reducing the burden for students is good, while the effect in most of the areas is not significant. The reality is the school still enrolls students and assigns classes using the score of students while pursuing a high-quality education, so parents are still being anxious. Therefore, to ensure students with the advantage in learning, a lot of parents will choose to purchase school district housing and send students to off-campus training institutions like the New Oriental Education and the Intelligent Practice System. Educational institutions in some small cities even put school courses directly in extracurricular classes, forcing students to participate in cram school after school, otherwise, they will not even be able to complete the textbook knowledge. There is burden reduction within the school but burden increasing outside the school, which created the current vicious circle phenomenon.

2.3. Inflated prices of medical supplies

The development and application of new technologies in the pharmaceutical industry in China have brought convenience and better effects to the medical field, but at the same time raised the medical cost. In addition to this, the need for survival and the distortion of the price mechanism also will raise the medical expenses in China. Most of the goods with increased prices are consumables closely related to the development of hospital treatment projects, such as gauze and alcohol. Hospitals are often unwilling to change manufacturers and can only accept such price increase. According to the research report of Bohai Securities, the market research company Research and Markets released a forecast report after investigating the business trends of the top 100 medical device companies in Asia. With large-scale growth, the growth rate of the biomedical device market will exceed 10%.

3. THREATS OF THE ISSUE OCCURRED

3.1. Houses

To begin with, the housing acquisition will generate by-products of housing on individual consumption. The increasing sales on housing will impact the consumption of furniture and electrical applicants positively since where purchasing housing, people have to afford furniture and fitting out costs as by-products. Which further escalates the housing costs and deteriorates the financial burden of the consumer. Secondly, if the housing price drops dramatically due to the deteriorating wealth effect Chinese consumers would perceive themselves as less wealthy than before. on the contrary to the escalation of housing price consumer will believe they are getting poorer and reducing the daily spending significantly. In addition, the mortgage will be greater than the price of the housing due to the dramatic drop in housing price. The consumer has to burden with the loan...
while the value of the assets reduces significantly, which leads them to face more stress and causes them to reduce their consumption.

The low-interest rate and expansionary monetary policy will initiate the real estate developer in a high debt ratio. Some other financial tools like Wealth Management and Trust get involvement in the real development, which boost the speculation of the real estate. Once the house prices decline, it will cause a rise in the non-performing loans (NPL’s) of both households, as well as real estate developers, banks, and financial institutions which have been speculating on price increases. Furthermore, the other industry which is closely associated with real estate such as steel, cement, and construction will also face the risk of credibility, no difference to the bank as well which provides loans to such industry. Bank will also encounter liquidity problems as a consequence. Therefore the impact caused by the burst of the real estate bubble is brutal.

A sharp house price correction in these bubble cities will weigh on fixed investment and private consumption, under this circumstance, individual consumption and investment will drop significantly. There it will restrict the economic growth.

At the same time, the demand to enhance the education quality is adding further burden to the families. When it becomes a kind of part of social cognition and culture awareness it will derive the current social security system to be formed to the state of "public tragedy". Under the low birth rate, education becomes abnormal. It shows that fostering investment derives to be the completion of generation, family, and social resources. In this champion of "education quality," the demanding side is inflating infinitely. The conflict between education supply and demand is not easy to settle.

3.3. Health care

The increase in health care costs might prompt governments to raise taxes, increase borrowing or reduce investments in other critical sectors such as education and infrastructure, suppressing economic growth and affecting both businesses and households. Similarly, US companies faced with rapidly growing health care costs might reduce employment and investments in the US economy. The rapidly rising health care spending could harm the economy by lowering GDP and employment, and increasing inflation.

4. THE GOVERNANCE OF THESE THREE ASPECTS BY NATIONAL POLICY

4.1. Restrictions in real-estates investment

According to the negative impact and pressure on people caused by the excessively high housing prices and overheated markets mentioned above, the government has issued purchase restrictions in more than 20 cities including Shanghai, Beijing, Tianjin, and Chengdu to solve this problem. The ‘three red lines’ are the most important criteria for restraining real estate companies. It includes: the asset-liability ratio of the real estate company after excluding the advance receipts should not be greater than 70%; the net debt ratio of the real estate company should not be greater than 100%; the short-term debt ratio of the real estate company should be less than 1.

Especially for Beijing, the government started by cracking down on malicious speculation and illegal funds entering the market and lowered the increase in housing prices within a certain range. Then the government worked at the source of the problem and controlled the land price to fundamentally reduce the development cost of real estate to lower the housing price.

For Shanghai, a housing purchase restriction policy is implemented, which restricts the number of houses that divorced people can purchase, and reduces the number of houses to alleviate the overheating of the housing market. Secondly, Shanghai regulations strictly prohibit operating loans, credit loans, and other funds from entering the market in violation of regulations.
At the same time, the government sets up a guide price, that is, a mandatory price range based on its authority and the current market situation. Real estate companies can consider reducing costs and optimizing costs to gain more or maintain profits. But this is also likely to lead to a decline in the quality of the house, thereby reducing the satisfaction and happiness that consumers obtain from purchasing.

4.2. Reduce the burden of students' homework and off-campus training

To reduce the pressure on domestic students of all ages, the education department in China has introduced various policies related to burden reduction, including the "double-reduction" policy, which targets effectively reducing the burden of excessive homework and off-campus training for students in compulsory education.

Beijing first promotes the rotation of cadres and teachers on a large scale and in a large proportion, to avoid the uneven distribution of educational resources caused by the high or low teaching quality of a certain school or region, which causes excessive pressure for students to choose a school. After-school services for compulsory education in the new semester in Shanghai will start with the implementation of the "5+2" model which is, 5 working days a week, at least 2 hours a day, and the end time is in line with the local off-duty time.

The "double-reduction" policy directly limits the scale of subject-based off-campus training institutions and reduces the length of their extracurricular training. It can be said to have a huge impact on off-campus training institutions. At the same time, among 57.377 million parent questionnaires, 99.6% of the students' parents reported that the teachers did not assign homework to them or ask them to correct the homework this semester. Such a policy directly reduces students' learning pressure and burden, but the problem of education anxiety is still widespread since students currently are not receiving higher-quality education and the problem of uneven educational resources causes the "theatre effect" to still exist. Therefore, without the help of homework and extracurricular classes, parents and students now actually become more anxious and their happiness is not improving as well.

4.3. Bulk purchasing of medical instruments and drugs and new medical insurance policy

Policies issued in response to the phenomenon of continuously increased high medical expenses mainly include the improvement of medical insurance and the centralized procurement of the medical industry. In the new regulations on medical insurance, the coverage of drugs increased by 148 types, of which 128 types of cancer drugs are covered, which greatly reduces the cost of medications for cancer families and reduces the possibility of poverty caused by the inability of affording high cancer treatment fees. At the same time, the new medical insurance policy has adjusted the level of medicines. 74 types of class B drugs have been changed to class A drugs to better protect the health of residents and standardize medical insurance reimbursement and drugs.

The initial policy was a two-invoice system, which required drugs to pass through at most one level of middlemen in the process of delivering drugs from pharmaceutical companies to hospital terminals. This policy can reduce intermediate circulation links and lower the terminal drug price. Subsequent centralized procurement policies are gradually updated, which is mainly reflected in the three aspects of covering varieties, covering areas, and determining rules for the bid-winning enterprise. The first 4+7 centralized procurement only included 11 regions, and it was gradually expanded to the whole country. Many companies are allowed to win bids and those with high prices are eliminated to ensure a healthy competitive landscape.

So far, the price cuts of all centralized procurements have been reached for more than 50%, and the total amount of online procurement orders through the provincial centralized drug procurement platform through the country's preliminary statistics is 931.2 billion yuan, which is a decrease of 60.1 billion yuan from 2019.

5. CONCLUSION

In conclusion, the main consumption of Chinese consumers is concentrated in three sectors, including housing, education, and medical care. The proportion of the consumption of these three sectors to the total has grown rapidly in recent years, while the income of the Chinese people has not increased in the same proportion. Therefore, various reasons have led to the decline in the happiness index of the Chinese people. The sharp rise in housing prices in the past decade has caused many areas to approach a housing price bubble, and the burden of residents’ mortgages has increased severely. The government, therefore, imposed purchase restrictions and set up guide prices to ease the burden on residents. For the medical industry, the price of medical equipment has been rising in recent years, and many families suffering from major diseases, such as cancer, have gone into poverty because they cannot pay high fees. In response to this problem, the government expanded the scope of diseases covered by medical insurance, and at the same time implemented a centralized procurement policy to minimize the use of the most basic medical equipment as much as possible. Finally, concerning the education industry, excessive academic burdens have caused parents to enrol students in cram schools and buy school district housing. To resist the imbalance in education, the government has implemented a double reduction policy.
to directly limit the scale of educational institutions from outside the classroom. These policies have been put forward by the Chinese government recently, so the current effect is not obvious. What we can see is that the implementation of these policies is in place. However, not everyone's happiness index has increased as a result, so even though policy has been made, people's concern is not eliminated but somehow increased. This article analyses the expenditure level and income distribution of Chinese consumers and links it with the happiness index, and studies the reasons why the index has not increased year-on-year in the era of rapid development in China with evaluation of the latest policies. Whether these policies are effective and how to better improve the national happiness index is what I will research next.

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