

Short-term, Medium- and Long-term Policies to Deal with the Impact of the Epidemic on the Economy

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Abstract: The global COVID-19 pandemic and its economic impact will wreak havoc on all economies of the world, pushing many into recession and possibly even depression. The purpose of this paper is to examine short- and medium-to-long-term policies to deal with the economic impact of the epidemic. First, the existing research results at home and abroad are sorted out, and the classic theories with guiding significance for this article are sorted out as the theoretical basis of this article; secondly, taking the new crown epidemic as an example, the impact path is briefly explained, and the focus is on the analysis of the new crown epidemic short- and medium- and long-term policies in the context. Discuss the reform trend and optimization direction of tax preferential policies when similar major epidemics occur in the future. Based on the simulation study of the impact of the epidemic and the adjustment of policy implementation based on the computable general equilibrium model, statistics published on the website, and further research on the impact. In the early stage of the epidemic, GDP fell by 9.32%, and the income and consumption of residents gradually turned positive in the later period.

1. Introduction

The rapid spread of the new crown pneumonia epidemic will wreak havoc on all the world's economies and greatly shake financial markets. Signs of a shock to the Chinese economy are already emerging as infections and deaths rise sharply [1-2]. Governments around the world have taken various measures to save lives and help restore stability in capital markets. Although governments have implemented regulatory frameworks for the same purpose, their content and density vary according to national circumstances [3]. For example, in the first few days of the outbreak, China took drastic measures to prevent the epidemic from spreading to the affected areas; and the United Kingdom let us understand that it will take measures to contain the epidemic, and stopping the epidemic route may have the best chance of safety, which To enable Britain to take measures to contain the plague [4-5].

The outbreak of the new crown pneumonia epidemic is a major public health emergency with the fastest transmission rate, the widest range of infectious effects, and the most difficult prevention and control since the founding of New China [6]. In addition to developing a comprehensive immunization plan, the Gries T study should carefully consider sound testing techniques. Testing should be organized on the basis of an appropriate testing infrastructure, which is important for companies, schools, universities and general managers. In the case of a systematic, expanded Covid-19 testing program, without vaccination, these costs could approach 0.5% of national income. Germany and other OECD countries will not need more lockdowns if large-scale testing infrastructure can be established quickly enough. This, in turn, will increase policy prospects and boost growth in Europe, the US and Asia [7]. Marwan K compared the two epidemics using descriptive analysis. Bottom line: The pandemic and Covid 19 are similar in that they have the same impact on lives with more serious health crises. They are seen not only as health epidemics, but as real diseases affecting all aspects of society [8]. In the face of the downward pressure on the economy brought about by the impact of the epidemic, it is necessary to increase the adjustment of macroeconomic policies and formulate effective policy measures to enable faster and better

recovery of economic growth [9].

The innovation of this article: focus on social hotspots in the topic selection, start from a small point, and take the policy under the background of major epidemics as the entry point. The impact of the epidemic may be limited and not obvious, but the impact on micro-individuals may be fatal. Paying attention to these individuals and their impact is very necessary to stabilize the economy and employment. In terms of research content, this paper emphasizes the differences between short-term and medium- and long-term policies, and studies the impact of the epidemic on the macro economy at the short-term level and the impact of the epidemic on the macro economy at the long-term level.

2. Research on Short-term, Medium- and Long-term Policies to Deal with the Impact of the Epidemic on the Economy

2.1 The Economy under the Impact of the Epidemic

(1) The impact of the epidemic on the macro economy in the short term

In the short term, the outbreak of the epidemic will also have an impact through the transmission of the financial market. When the epidemic occurs, the real economy will be directly damaged first, and then the macro level will be damaged. The deterioration of macro fundamentals will lead to changes in the benefits and risks of the entire society, and then it will affect the evaluation system of enterprises at the micro level for risk and return. Based on this, due to changes in expected returns and risk preferences, the demand for funds and the behavior of suppliers will also change, and changes in the relationship between supply and demand of funds in the financial market will bring about macroeconomic changes [10-11].

The short-term international market transmission is mainly manifested in international trade [12]. When the epidemic occurred, on the one hand, some countries adopted various measures to further restrict my country's foreign import and export products, and adopted stricter testing and quarantine measures for Chinese goods, containers, and transportation facilities. Staff are forced to isolate and protect; imports of Chinese products are suspended, which will lead to damage to my country's exports [13]. On the other hand, due to the global spread of the epidemic, production and production in foreign countries have been suspended, and transportation has been blocked, and the imported goods needed by my country cannot be obtained. Both imports and exports have been hit, which will affect the balance of payments, and then lead to macroeconomic fluctuations [14].

(2) The long-term impact of the epidemic on the macro economy

The impact of emergencies such as the new crown pneumonia epidemic on the long-term economy is both positive and negative. It will affect the macroeconomy by affecting the important determinants of long-term economic growth. Therefore, whether emergencies can bring long-term economic growth depends on which of the positive and negative effects will be greater [15-16].

2.2 Economic Policies in the Context of the Epidemic

(1) Short-term policy

The consumer voucher policy is to stimulate consumption desire by subsidizing consumers, so as to stimulate consumption and release demand. According to past data statistics, it can be concluded that after the implementation of the consumption subsidy policy, the total consumption will increase immediately, and the effect of promoting consumption will be immediate, especially the industries that were designated as key care before the issuance of consumption coupons, the impact effect is more significant [17].

The unemployment subsidy policy is similar to the consumer voucher policy to a certain extent. It provides temporary unemployment subsidy to a large number of unemployed workers who lost their jobs during the epidemic, which plays a role in increasing residents' income and promoting residents' consumption, thereby increasing the total social demand. However, the implementation effect of the unemployment subsidy policy is affected by the hidden employment scale [18].

VAT relief policies for small-scale taxpayers: The specific policies include: issuing financial institutions to farmers, the interest income from small loans to farmers obtained by small-amount

loan companies established with the approval of provincial financial management departments (financial offices, bureaus, etc.) is exempt from value-added tax; the taxpayer is The guarantee fee income obtained by farmers, small enterprises, micro enterprises and individual industrial and commercial households from borrowing, issuing bonds to provide financing guarantee, and re-guarantee fee income from providing re-guarantee for the above-mentioned financing guarantees are exempt from value-added tax.

(2) Medium and long-term policies

The rise of the street stall economy under the background of the new crown epidemic has important practical significance for my country's economic recovery and social development. The protection of the rights of street stall operators, the maintenance of consumer rights, and the stability of the market economic order all need to think about the legal regulation path of the street stall economy. The issue of the legal regulation path of the street stall economy is not only a legal issue, but also a practical one, so we must look at it from a long-term perspective, regulate it, develop it, and activate the vitality of the street stall economy. In response to the problem of the imperfect legal system of the street stall economy, a comprehensive legal system should be established. There should be legislation at the central level as the guidance of higher-level laws, as well as the administrative regulations of the State Council as supplements, and local regulations should be specifically implemented; from the perspective of street stall economy The subjects, market access procedures, rights and remedies and other aspects should improve the relevant legal content of the street stall economy, and at the same time, strengthen the judicial and legal regulation of the street stall economy. Comprehensively promote the development of my country's street stall economy from the perspectives of legislation and judiciary.

3. Survey and Research on Short-term, Medium- and Long-term Policies to Deal with the Impact of the Epidemic on the Economy

3.1 Data Preparation

The data of the social accounting matrix is a set of equilibrium data sets that can be matched with the computable general equilibrium model, and its data structure framework can be well applied to the computable general equilibrium. First, the social accounting matrix gives all variables in the model initial Secondly, using the SAM table as the data base, the initial values of the parameters in the model are solved by the calibration method, so that the equations of the CGE model are computable. This article uses statistics published on the website and data on the impact of the "new crown" epidemic on my country's economy, market and various aspects, combined with the method of calculating general equilibrium. Therefore, when considering the division of departments, according to the degree of impact of the epidemic, there are certain practical significance.

3.2 Computable General Equilibrium Model

Because the standard CGE model is static, it cannot study and simulate economic changes in future periods. In addition, different from the standard CGE model, the relationship does not need to be reflected in the standard model, and the study of dynamic CGE model needs to introduce this relationship for further research. There are different dynamic models in academic research on this aspect, the more commonly used is the recursive dynamic model, which is a staged static CGE model with repeated iterative calculation.

Assuming that a representative resident achieves utility maximization by choosing different consumption levels given the income HY for consumption and the price HC of the commodity, the resident consumption is obtained as:

$$HC = \frac{a_h \cdot HY}{PC} \quad (1)$$

A resident's income is determined by the equalization of the resident's income and expenditure:

$$\sum_{CC} PC \cdot HC + HS = \sum_{PS} W \cdot LS + \sum_{PS} RPS \cdot KS + GTH \tag{2}$$

The solution of the endogenous change obtained after the model is calculated and solved in this paper is the same as the initial value of the change, so it is judged that after the stability test, shock scenario simulation and policy simulation can be carried out.

4. Analysis and Research on Short-term, Medium- and Long-term Policies to Deal with the Impact of the Epidemic on the Economy

4.1 Shock Scenario Setting

This paper mainly considers the domestic consumption shock, domestic labor supply shock, import shock and export shock caused by the re-emergence of the global new crown epidemic. We will set five levels of shock scenarios according to the five stages of the development and progress of the epidemic, which represent the front, middle and back of the epidemic development and bring them into the model for simulation, as shown in Table 1 below:

Table 1. Shock Scenario Setting Table

	During the period of restricted access during the epidemic (A1)	During the period of restricted access during the epidemic (A2)	During the period of restricted access during the epidemic (A3)	During the period of restricted access during the epidemic (A4)	The epidemic is gradually declining (A5)
marginal propensity to consume	-15%	-15%	-13%	-7%	6%
labor supply	-17%	-12%	-7%	2%	2%
total export	-11%	-10%	-7%	2%	6%
total import	-11%	-10%	-8%	-8%	2%

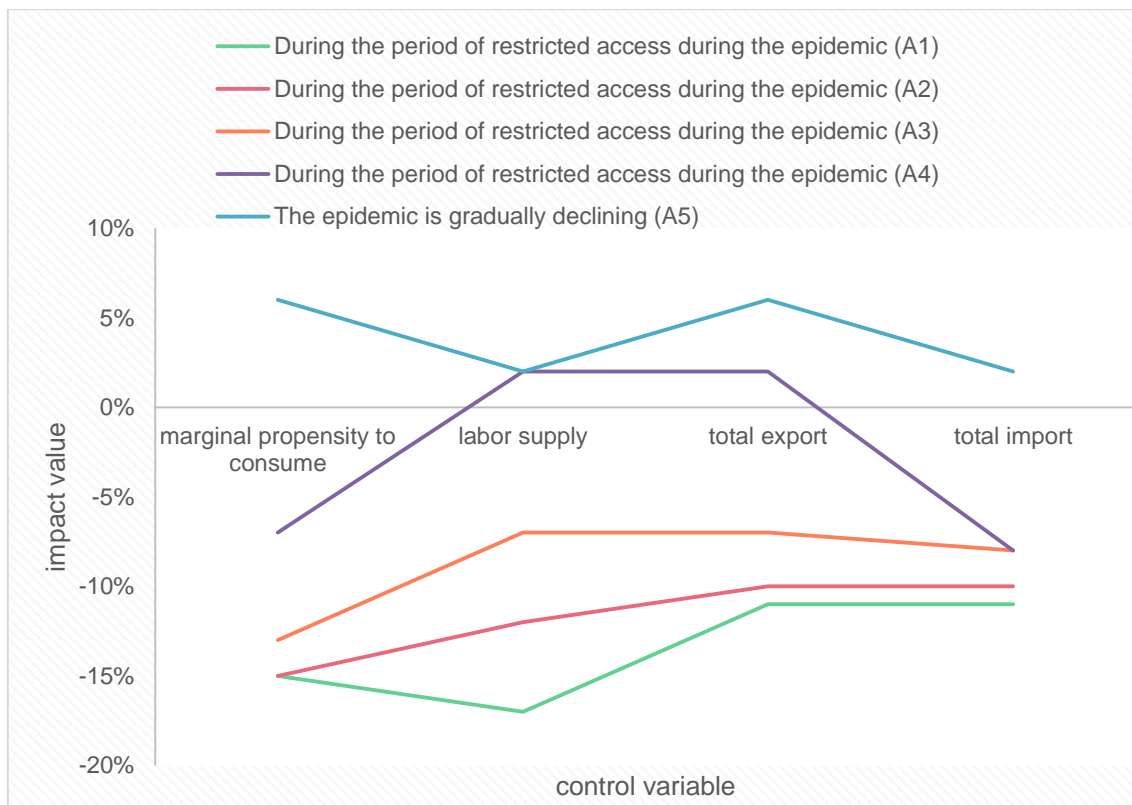


Figure 1. Five levels of shock scenarios for the development of the epidemic

In the early days of the epidemic, residents were forcibly unable to go out, resulting in a shortage

of labor for many jobs that could not work online. As the epidemic was brought under control, enterprises and residents also minimized non-essential going out in response to the country's call for epidemic prevention and control. Therefore, in the setting of the scenario, changing the size of the labor supply, as shown in Figure 1, is used to analyze the impact on the economy of the short-term reduction in labor supply due to necessity during the epidemic.

4.2 Macroeconomic Related Variables

The simulation results of macroeconomic-related variables under different shock scenarios are shown in Figure 2. On the whole, the new crown pneumonia has had different degrees of negative impact on the macro economy at various stages. During the epidemic period, GDP will drop by 9.32% under the four shocks of import and export, labor supply and consumption. Consistent with the trend of simulated changes in GDP in stages A1 to A5 in the model, it can be seen that the model can simulate reality to a certain extent.

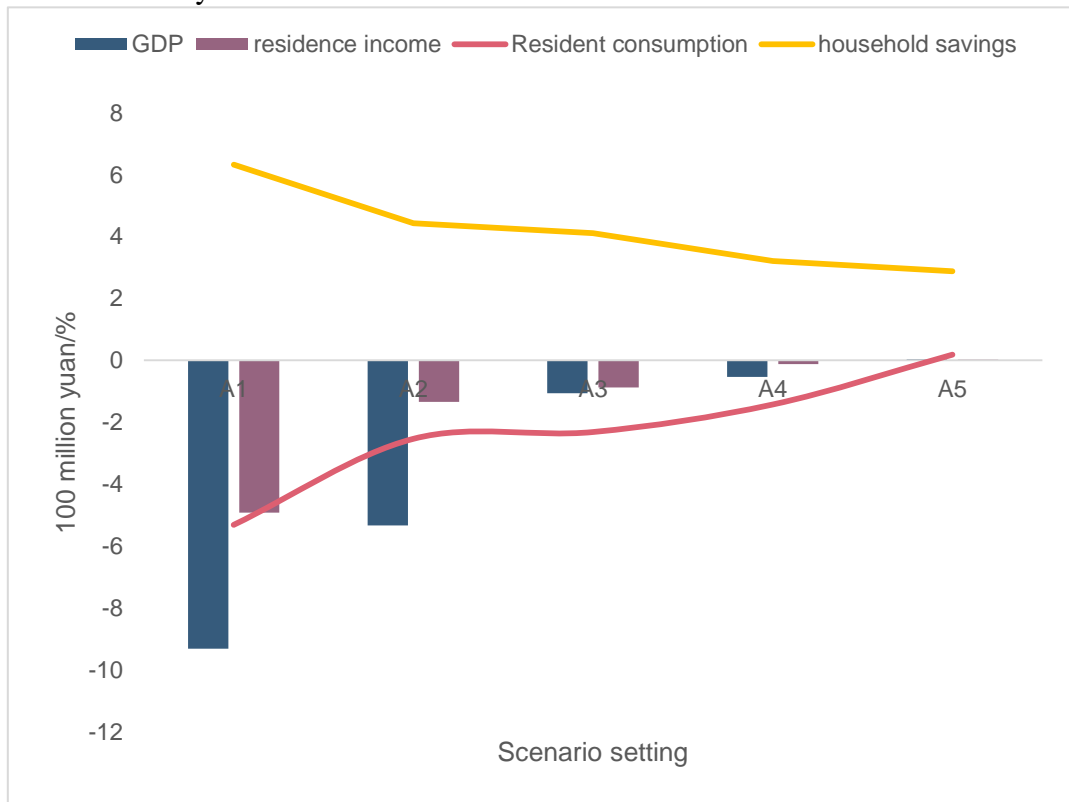


Figure 2. Simulation of the impact of different scenarios on my country's macroeconomic-related variables under the epidemic

From the perspective of residents, during the restricted access period of the epidemic, residents' income will decrease by 4.93%, residents' consumption will decrease by 5.32%, and residents' savings will increase by 6.32%, indicating that the increase in residents' savings is greater than the decrease in income and consumption; during the epidemic During the partial rework period, the income level of residents decreased by 1.35% year-on-year, the consumption level of residents decreased by 2.54% year-on-year, and the savings of residents increased by 4.43% year-on-year. A short-term reduction in supply will have a profound negative impact on residents' income and consumption. From the A2 period to the A5 period, with the good control of the epidemic and the recovery of people's confidence in the economy, residents' income and consumption gradually turned positive, and residents' savings gradually decreased.

5. Conclusions

At present, the international environment is still unclear, and the domestic epidemic situation still has the possibility of another outbreak. The epidemic prevention and control work cannot be

relaxed. Based on the current policy changes in my country under the new crown epidemic situation, this article puts forward its own thoughts and suggestions on how to establish long-term and stable legal regulation measures under different economic policies, especially strengthening the content of the perfect legal regulation path. Provide reference for the formulation and revision of legal norms in the future, so that they have "laws to abide by"; for example, pay attention to the implementation of judicial measures, so that the development of the street stall economy can be effectively protected by law, so as to build a systematic and specific legal governance structure for the street stall economy ; The financial rescue policy to promote consumption has a certain effect on leveraging the consumer side, the financial rescue policy to stabilize employment has a positive effect on promoting employment, and the expansion of employment scale also promotes output; formulating financial rescue policies from this perspective, The main force of the policy should be to help individuals, and it is necessary to implement the consumer voucher policy, employment subsidy policy, unemployment subsidy policy, etc.

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