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# Stagflationary effect of government bond financing in the transforming Chinese economy: a general equilibrium analysis

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## Abstract

This paper studies how the method of government debt financing affects the macroeconomic performance of the transforming Chinese economy. The investigation is conducted within the context of an endogenous growth model that incorporates the major institutional features of the Chinese economy. Using this framework, we evaluate the effects on the growth rate of output and inflation if the Chinese government relies more on bonds and less on money creation for budget deficit and debt repayment financing. It is shown that although this policy change can reduce the growth rate of the money supply, it can generate a stagflationary effect: reducing the rate of output growth while raising the rate of inflation, if the initial fraction of government deficit and debt repayment financed by bonds is sufficiently small and the tax rate on labor income is sufficiently low. © 2000 Elsevier Science B.V. All rights reserved.

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## 1. Introduction

In 1993, only 1 year after Deng pushed the on-going economic reform further by visiting South China, the Chinese economy appeared to overheat considerably. Investment projects were undertaken everywhere in the country, especially in the coastal regions; the general price level rose rapidly, indicating an excessive aggregate demand. To cool off the economy, the Chinese government initiated an economic ‘‘soft-landing’’ at the end of June 1993. In addition to raising interest rates on government bonds and bank deposits, the government made a serious attempt to reduce the growth rate of the money supply by tightening bank credit. To lower inflationary expectations, certain measures of price control were imposed. Moreover, the government increased the quantity of bonds issued to the public to soak up liquidity (the value of outstanding state bond increased from 4.8% of GNP in 1992 to 5.7% in 1995). [1]

Surprisingly, the measures undertaken to cool off the economy generated a period of stagflation. On the one hand, the growth rate of GDP declined (14.1% in 1992, 13.1% in 1993, 12.6% in 1994, and 9.0% in 1995), on the other, inflation accelerated (5.4% in 1992, 13.2% in 1993, 21.7% in 1994, and 14.8% in 1995) and did not drop to 6.1% until 1996.

By identifying the exchange rate policy adopted during the period of 1993–1994 as a major destabilizing factor, Naughton (1995) offers a reason why the inflation rate in China did not drop for 2 years. In January 1994, China devalued its currency at a rate around 8.7 yuan to the dollar. Exports increased in response to the devaluation and the trade balance swung from a deficit of US$12.2 billion to a surplus of US$5.35 billion. This increase in the trade surplus resulted in a huge inflow of foreign currency and the Chinese central bank opted to purchase foreign currency earned by exporters. As a result, the government injected about 250 billion yuan into the domestic economy.

To our knowledge, there is no explanation given as to why stagflation took place in China during that period. The objective of this paper is to provide a possible explanation. We do so by studying how the method of government debt financing affects the macroeconomic performance of the transforming Chinese economy. In particular, we investigate the effects on the growth rate of output and inflation if the Chinese government relies more on issuing bonds and less on printing money for budget deficit and debt repayment financing.

As is commonly agreed, the overheating of China’s economy was mainly due to monetization of government deficit, which is caused by the combination of the

[1] The data quoted here are obtained from Watanabe (1997).