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*Monetary Policy and Credit in China: A Theoretical Analysis**

A three-sector model of the Chinese economy is developed in which the activity of state-owned enterprises (SOEs) is constrained by the state-imposed credit plan for working capital. Our analysis indicates the weaknesses of credit control and nominal interest rate variation as tools for influencing the price level; but the hardening of SOEs' budget constraints is found to be an effective device. The existence of credit and currency controls tends to make devaluation contractionary. Furthermore, because of general equilibrium repercussions, policies that boost industrial exports tend to reduce welfare in the agricultural sector, where poverty is concentrated.

1. Introduction

The development of substantial elements of a market system in the real sector in China over the past two decades has been accompanied both by bouts of high inflation and, recently, by deflation. To combat these problems, the authorities have relied primarily on monetary policy.[1] However, commercial banking in China, which is dominated by four large state-owned banks, has remained subject to the type of controls associated with central planning. The main instrument of monetary control is quantitative regulation by the "credit plan," which is set by the People's Bank of China (PBC).[2] In formulating the credit plan the PBC collaborates closely with the State Planning Commission. As a result, the credit plan is used not just to control the money supply; it is also used to pursue more microeconomic objectives, with detailed priorities set for "policy lending," which, in some cases, is even specified at the level of the individual borrower. Policy lending is employed

*We are grateful to a referee for constructive comments. Earlier versions of the paper were presented at the ESRC Money, Macro and Finance Research Group half-day conference on Money, Macroeconomics and Finance in China, London, March 1997, and the annual confer-

[1]See, e.g., Allsopp (1995) or World Bank (1995).

[2]For general discussions of the credit plan see Montes-Negret (1995) and World Bank (1995, 1996).

0164-0704/2001/$1.50

both to support chosen growth sectors and to underpin loss-making state-owned enterprises (SOEs), and this leads to a large proportion of bank loans being non-performing.[3] Many loans are effectively subsidies extended under government direction (blurring the distinction between monetary and fiscal policy), while often the banks themselves concede parts of loans to ensure SOEs' survival (World Bank 1996; Zou and Sun 1996).

In this paper we develop a theoretical model of monetary policy and credit in China, focusing on the role of working capital.[4] This is a particularly important component of the credit plan, being a priority item (Montes-Negret 1995) and constituting about 60% of planned loans (World Bank 1996). We develop a three-sector model in which agriculture is modeled as a separate sector, but industry is split into two sectors, which produce a non-traded and an export good, respectively.[5] For simplicity, the sector producing the non-traded industrial good is assumed to be composed entirely of SOEs, for whom output is constrained by the availability of credit for working capital.[6] Also, by assuming that a portion of the loans in this sector is not repaid to the banks, we allow for SOEs having soft budget constraints. In contrast, the export sector is treated as facing no limits on the availability of credit for working capital. This is intended as a stylized representation of the priority that is given to exports in the credit plan (Montes-Negret 1995). However, during periods of severe credit tightening, the difficulties encountered by SOEs have led the authorities to override other priorities and give the SOEs a larger proportion of the credit available. This happened, for example, in early 1996 (see Sachs and Woo 1997). We therefore also modify the model to allow for credit rationing to the export sector. Throughout, the simplifying assumption is made that agriculture has no working capital needs.

Because of the complex mix of plan and market in China and the variety of institutional forms under which production takes place, any stylized model of the Chinese economy should be treated with caution. Nonetheless, we believe our analysis indicates the importance of attempting to model the specific features of the Chinese economy, for we obtain results about the effects of monetary policy that are quite different from those

[3]An official (i.e., conservative) estimate puts the proportion at 22% (*Economist* 1997).

[4]It appears that the Chinese monetary system has not been analyzed from the macrotheoretic viewpoint, though numerous econometric analyses have been undertaken (e.g., Chen 1997; Yu 1997; and Hassan 1999).

[5]This three-sector framework is also used in Bennett and Dixon (1996). There, however, we model dual-track pricing and urban goods rationing. Here, we suppress such considerations and elaborate on the monetary side.

[6]This is the key constraint that drives the determination of macro equilibrium. In contrast, in Bennett and Dixon (1996) the critical factor is the availability of imported intermediates, which is limited by the balance of trade constraint.