

ENDING INFLATION IN CHINA: FROM MAO TO THE 21ST CENTURY

Richard C. K. Burdekin

For most of its existence, the People's Republic of China has essentially been free of open inflation. Rigid controls kept official prices of many goods virtually unchanged for decades before economic reforms began in 1978. The government had to confront upward spikes in inflation in both 1988–89 and 1993–95, however. Inflation peaked at over 24 percent in 1994 before falling back to single digits in 1996 and less than zero in 1998. By 1998, the government's concern had clearly shifted to the slowing growth rate of the economy and the weaknesses in the nation's banking system. The increased government expenditures aimed at boosting growth and recapitalizing the banks may lead to new fiscal strains and future inflation.

An Historical Perspective on Chinese Inflationary Pressures

High inflations are almost always associated with both rapid rates of money growth and large budget deficits. While deficits that are not monetized need not be as inflationary, the pressures to at least partially monetize such deficits are often strong—especially in countries where private financial markets are not fully developed (Burdekin 1995). Table 1 provides data on inflation, broad money (M2), budget deficits, and output in the PRC for post-1978 period. While M2 has grown at a double-digit rate in every year, the inflationary consequences have been reduced by two factors: (1) the boost to money

Cato Journal, Vol. 20, No. 2 (Fall 2000). Copyright © Cato Institute. All rights reserved.

Richard C. K. Burdekin is Professor of Economics at Claremont McKenna College. The author thanks Xiaojin Hu, Yanjie Feng Burdekin, Tom Willett, Pierre Siklos, Mack Ott, Charles Hu, Bill Brown, Marc Weidenmier, an anonymous referee, and the editor for helpful comments and is grateful to Ida Whited and Ling Cao for research assistance.

TABLE 1
INFLATION, MONEY, BUDGET DEFICITS, AND OUTPUT IN THE
PEOPLE'S REPUBLIC OF CHINA, 1979-98

	Rate of Growth of the Consumer Price Index	Rate of Growth of Broad Money (M2)	Broad Money as Share of GNP	Budget Deficit as Share of GNP	Rate of Growth of Real Output
1979	2.0	49.2	33.3	5.2	7.6
1980	6.0	25.9	37.0	3.8	7.8
1981	2.4	18.3	41.4	2.1	4.5
1982	1.9	14.6	43.6	2.2	8.3
1983	1.5	19.7	46.7	2.1	10.5
1984	2.8	32.6	51.7	1.8	14.6
1985	9.3	35.5	54.2	0.8	12.9
1986	6.5	30.2	62.2	2.2	8.5
1987	7.3	25.3	66.6	2.2	11.1
1988	18.8	20.7	64.3	2.5	11.2
1989	18.0	18.7	67.3	2.4	4.3
1990	3.1	28.9	78.9	2.9	3.9
1991	3.4	26.7	85.9	3.4	9.2
1992	6.4	30.8	91.3	3.4	14.2
1993	14.7	42.8	100.5	3.0	13.5
1994	24.1	35.1	100.5	3.8	12.7
1995	17.1	29.5	105.7	3.7	10.5
1996	8.3	25.3	112.6	3.7	9.5
1997	2.8	20.7	125.1	—	8.8
1998	-0.8	14.9	—	—	—

NOTE: All figures are expressed in percentage terms.

SOURCES: The consumer price index data are from *International Financial Statistics*, July 1999 (series 64..x) and the 1998 *China Statistical Yearbook* (Table 9-1)—with pre-1985 data based on the “overall retail price index”; the money supply data are from *International Financial Statistics*, July 1999 and the 1998 *International Financial Statistics Yearbook* (sum of series 34 and 35); the ratio of broad money to GNP is obtained by dividing the money supply data by GNP in current prices from the 1998 *China Statistical Yearbook* (Table 3-1); the budget deficit figures for 1979-92 (adjusted to conform to conventional Western standards) are as given by Wong, Heady, and Woo (1995: 24); the 1993-96 deficit figures are computed by the author (applying the same method) using data from the 1997 *China Statistical Yearbook* (Tables 7-1 and 7-3); and real output growth refers to gross domestic product in 1990 prices from the 1998 *International Financial Statistics Yearbook* (line 99b.p).

demand arising from rapid real output growth averaging 9.7 percent over the 1979–97 period, and (2) the falling income velocity of circulation as reflected in the rising share of M2 in gross national product. The near quadrupling of the M2/GNP ratio between 1979 and 1997 enabled the government to obtain substantial seigniorage revenue from expansion in the real money supply. Revenue from real currency expansion reached an estimated 3.8 percent of gross domestic product in 1992 (World Bank 1995: 125).

But even in the face of this rising appetite for real money balances, the rise in M2 growth to 42.8 percent in 1993 and 35.1 percent in 1994 was accompanied by a surge of inflation above the 20 percent level.¹ Can budget deficit pressures explain such seemingly excessive rates of monetary expansion? At first glance, the answer would seem to be no. Between 1980 and 1996, the budget deficit, while showing an upward trend after 1985, remained below 4 percent of GNP. Even after being adjusted to conform to conventional Western standards,² the deficit numbers may still paint a potentially misleading picture, however. Account should also be taken of lending by the central bank, the People's Bank of China, for policy purposes (chiefly loans to loss-making state enterprises) if we are to measure the government's actual financing needs.

Although there is no official consolidated budget deficit that incorporates such central bank lending, World Bank estimates tie the jumps in inflation in 1988 and 1993 to a near doubling of the consolidated deficit in 1988 and another sharp jump in 1993. The World Bank (1995: 28) has the consolidated budget deficit at 6.4 percent of GNP in 1988 and 8.9 percent in 1993. Wong, Heady, and Woo (1995: 28) give even higher numbers, suggesting that the consolidated deficit was 7.6 percent of GNP in 1988 and rose above 10 percent of GNP as early as 1990–91. The World Bank (1995: 39) report argues that the People's Bank's "obligation to finance a persistent CGD [consolidated government deficit] has caused the repeated buildup of inflationary

¹Baizhu Chen's (1997) money demand estimates suggest that broad money growth should be held to 28–29 percent in order to keep inflation below 10 percent, assuming a 10 percent rate of real output growth. Interestingly, actual broad money growth exceeded 29 percent from 1992 to 1995 before falling back to 25.3 percent growth in 1996 just as inflation itself returned to single digits.

²Under the Chinese definition of the deficit, debt issues are counted as part of total revenue. For consistency with the standard Western definition of the budget deficit, proceeds from debt issue must be subtracted from the officially stated budget balance (Wong, Heady, and Woo 1995: 23–25). This adjustment can only be performed through 1996, however. Official data on debt proceeds are no longer given in the *China Statistical Yearbook*. The 1998 issue merely offers 1996 data previously reported in the 1997 *Yearbook*.

pressure in China” and accounted for more than two-thirds of the annual growth in reserve money over the 1987–93 period. The World Bank (1995: 53–54) also links recent Chinese inflationary surges to sharp increases in the People’s Bank’s lending to the financial system in 1988 and again in 1992.

Even though direct monetization of the official Chinese budget deficit has been negligible over the 1990s, indirect monetization funding the off-budget loans encompassed by the consolidated budget deficit appears to have increased just prior to the accelerations of inflation in both 1988 and 1993–94. The effects of increased monetization were exacerbated by panic buying and rising velocity in 1988. There were also major administrative price increases during each inflationary episode. Prices of pork, vegetables, sugar, and eggs were hiked by as much as 60 percent in April 1988 while, in 1994, food price inflation was fueled by a 40 percent rise in grain procurement prices (Oppers 1997: 9–12). These administrative factors operated in conjunction with easier monetary policy and heightened deficit-monetization pressures, however.

Earlier periods of inflationary pressures in the pre-reform era in 1953, 1956, and 1961 typically were also accompanied by deterioration in the government’s fiscal position. While the 1953 and 1956 episodes were, in part, a manifestation of the state’s investment and socialization policies, Hsiao (1971: 236–51) points to a significant role played by fiscal factors in each case. In 1953 and 1956, inflation was around 10–15 percent (counting both open inflation and estimated repressed inflation). A more serious upsurge in inflation occurred in 1961, when a 16.2 percent retail price increase was coupled with as much as a 260 percent increase in free-market prices (Peebles 1991: 24). While basic necessities continued to be rationed, this surge in free-market prices apparently reflected a deliberate strategy of selling high-price goods in order to withdraw money from the market (Peebles 1991: 28–29).

Underlying inflationary pressures in 1961 reflected primarily the collapse of industrial and agricultural output in the aftermath of the failed “Great Leap Forward” but also followed a large expansion in the size of the state’s budget from 1958 to 1960.³ Moreover, as in the post-reform period, standard budget deficit figures are understated in

³Imai’s (1994) estimates of repressed inflation over the 1954–92 period confirm heightened inflationary pressures in 1956 and 1958 to 1961, although estimated total inflationary pressure is limited to 2.1 percent in 1956 and 30.2 percent in 1961. Imai (1994: 149) also points to one further inflationary spell in the pre-reform era that appears to have been linked to the Cultural Revolution (with total inflationary pressure peaking at 9.6 percent in 1968).

that they do not take into account the use of the People's Bank as a provider of the state enterprises' working capital needs. Loans from the People's Bank provided 100 percent of quota working capital from 1959 through July 1961, which "relieved the budget of its share of the burden and thus ensured the appearance of a budgetary surplus by means of credit inflation during a period of high fiscal investment" (Hsiao 1971: 78).

The inflationary pressures of the 1950s and early 1960s occurred at the time when the Chinese economy had already been largely "socialized." Even before that process began, the PRC was confronted by a rampant inflationary spiral that had begun under the earlier Nationalist regime. When Mao Tse-Tung proclaimed the People's Republic of China on October 1, 1949, prices were skyrocketing. Wholesale prices in Shanghai and Tianjin doubled in October–November 1949, and there was an overall 140 fold increase in the renminbi money supply between December 1948 and December 1949 (Burdakin and Wang 1999). By March 1950, wholesale prices were more than five times higher than the October 1949 levels, and more than 200 times above the levels reached in June 1949, just after Shanghai fell to the communists in the final stages of the Chinese Civil War.

The extent of the new government's fiscal imbalance appears to have been as striking as the rates of price increase. While there was no national budget at this time, Ch'en Yun, who was in charge of the Committee on Financial and Economic Affairs in 1949, put the budget deficit at two-thirds of total expenditures (Ch'en 1984: 77). Ma and Kao (1990: 18) have since estimated that the deficit averaged 47.74 percent of total expenditures in 1949.

Methods of Inflation Control

In high inflation cases, the rate of price increase typically exceeds the rate of money supply growth as individuals unload the depreciating currency faster and faster, causing the velocity of circulation to accelerate. One way to reduce the turnover of the currency is to offer bank deposit accounts that are indexed for inflation. Indexed accounts were first introduced in 1949 in the aftermath of the flight from the currency that occurred under the old Nationalist regime. Under the "parity deposit system" introduced by the People's Bank of China on April 20, 1949, the value of deposits was set in terms of a commodity unit that conformed to the consumption pattern of the local population. This essentially indexed deposits to commodity prices and appears to have motivated substantial growth in bank deposits despite continued rapid inflation. In Tianjin, for example, the volume of bank

deposits in June 1949 stood at 20.8 times the March level (Pien Hsieh Tsu 1986: 81).⁴

Indexation of bank deposits was reintroduced in the face of the near 20 percent inflation of 1988. Fears that the government was about to remove its remaining price controls helped fuel a buying panic, whereby the public pulled their funds out of the banks and used the proceeds to stock up on durable goods. The M2/GNP ratio dropped in 1988, after rising in every prior year in the reform period, and there was also a dramatic fall in China's historically high savings rate (Sung 1995). To help combat this flight from financial assets, the government announced that savings deposits of three years or longer maturity would be eligible for a "subsidy interest rate" (SIR) based on the differential between the inflation rate and the interest rate on three-year savings deposits.⁵

The SIR remained in double-digits through the first three quarters of 1989, peaking at 13.64 percent. Adding the SIR to the base interest rate payable on three-year savings deposits yielded effective nominal returns above 20 percent in 1989, thereby keeping real returns positive despite the presence of 18 percent inflation. McKinnon (1994: 453) points to the importance of the 1988–90 indexation in allowing the Chinese authorities to "preserve the incentives for the nonstate sector in general, and households in particular, to accumulate monetary assets." Indexed government bonds with a three-year maturity were also introduced in late 1988. Had the SIR remained at peak 1989 levels, these bonds would have yielded nominal returns in excess of 26 percent. But, by the time the indexed bonds matured in 1991–92, the inflation rate was below the three-year savings deposit rate of 8.28 percent and the SIR was zero.⁶

The holders of the indexed bonds would have received only 9.28 percent in 1991–92 (the 8.28 percent savings deposit rate plus 1 percent) had the authorities not retroactively hiked the payout to match the 14 percent coupon paid on the nominal bonds. This move was followed by renewed indexation of government bonds in 1993. But the outcome was quite different in that inflation was not con-

⁴Moreover, after the "parity deposit system" was adopted by the Shanghai authorities on June 14, 1949, bank deposits are said to have grown much faster than commodity prices over the July–October 1949 period (Hsia 1953: 61).

⁵The price index used to calculate the value of the SIR is an unpublished "Total Commodity Retail Price Index" that includes retail commodities, service products, and producer goods (Burdekin and Hu 1999).

⁶Under the system adopted in China—contrary to the usual practice in, for example, Canada, the United Kingdom, and the United States—the inflation compensation payment, if any, is made at maturity based on the SIR at the end of the three-year holding period.

trolled before the bonds matured and actual payouts did exceed 25 percent. The March 1996 SIR of 11.29 percent, for example, coupled with a base rate of 13.96 percent, yielded a total return of 25.25 percent.

On April 1, 1996 the authorities announced a permanent end to the indexation policy. Nevertheless, the indexed bond issues formed an integral part not only of the Chinese government's anti-inflation program but also of the attempt to replace the prior system of "induced" bond subscriptions—whereby payments were deducted from salaries and operated like a withholding tax—with voluntary purchases. With indexation, bond holders now had a ready-made hedge against inflation, making the bonds a potentially attractive alternative to simply hoarding durable goods. This new policy was accompanied by mushrooming bond trading volumes (Burdekin and Hu 1999).

More drastic palliatives than indexation were considered as the gradual removal of price controls was met by run-ups in commodity prices. Indeed, the Price Reform Research Group of the Chinese Academy of Social Sciences called for (1) the establishment of a price ceiling/protection price, (2) organizing a special (procurement) market for trading key commodities, (3) adjusting demand and supply indirectly via monetary and fiscal policy, and (4) using state trading companies to stockpile commodities and release them onto the market (Chung Kuo Shê Hui K'ê Hsüeh Yüan Chia Ko Kai Ko K'o T'i Tsu 1986: 139).

Such measures had been adopted in the 1949–50 period when state trading units sought to mobilize supplies—obtained in the countryside through the tax-in-kind, from the output of state enterprises, and by purchase of private-sector output—and release them onto the market in the cities to combat shortages and offset the successive price jumps that arose there (Burdekin and Wang 1999). Their operations became a key element in the communist policy of conducting "economic warfare" against speculators (Hsia 1953) and containing inflation in the cities. Effective March 10, 1950, the trading companies were reorganized into a full nationwide system, further boosting their ability to equilibrate relative prices of commodities over the different regions and offset any local spikes in price.

While no such widespread intervention has taken place in the reform era, the authorities have, at times, resorted to administrative measures of price control.⁷ For example, in the second half of 1995,

⁷Moreover, although the government did not implement the Price Reform Research Group's proposals, price controls were kept in place on a subset of key commodities such as cotton, fertilizers, oil, and grain. Higher prices remained available on the black market,

the municipal government in Chongqing introduced a set of administrative and economic measures aimed at reining in the city's inflation rate (*Shih Chieh Jih Pao* [*World Daily*] 1996). Chongqing had had the worst inflation performance in 1994 of all the 35 largest cities in China. Focusing on basic foods, the municipal government increased their stocks of grain, oil, and meat and intervened aggressively to offset upward pressure on the market price of stocked meat. While these measures were accompanied by resumption of a rationing system, the policy of unleashing a large supply of a key commodity (in this case, 500 metric tons of stocked meat) onto the market to drive down urban prices remains very much in line with the 1949–50 initiatives.

Ending Inflation in the Post-Reform Period

In 1950, intervention in key commodity markets and indexation measures were supported by administrative controls pending the elimination of a major source of the inflationary pressure—the government's own massive budget deficits—later in the year (Burdekin and Wang 1999). At that time, increased resort to administrative controls foreshadowed the movement toward a centrally planned economy. In post-1978 China, the state has proved unable to resist the temptation to, at times, resort to dictatorial methods in times of crisis. Periodic crackdowns on speculative activity continue to occur in China, albeit in a milder form than in the 1950s. Edicts against trading rice futures and government bond futures were implemented in the midst of the post-1993 upsurge in inflation, for example. There is also the Chongqing municipal government's decision to supplement market-based intervention in commodity markets with such administrative measures as a return to a rationing system.

Nevertheless, the current Chinese regime was able to contain the 1988–89 and 1993–95 inflationary upsurges without undoing the major thrust of its reforms. The World Bank (1996: 10–11) also points out that “1994 and 1995 saw a contraction in borrowing from the central bank and a shift toward commercial bank financing, and direct borrowing from the public (using treasury bonds.)” This followed the 1994 Budget Law that prohibits the government from borrowing from the People's Bank of China.⁸ The budget deficit expanded in the late 1990s, however, as the government launched a fiscal stimulus

however, and resistance to government attempts to control China's cotton crop culminated in a so-called market rebellion in the fall of 1994 (Kahn 1994).

⁸The Budget Law has been accompanied by a variety of other financial reforms that include

program aimed at combating slowing economic growth. And the 1999 budget deficit was expected to rise to nearly double the 1998 deficit of 96 billion yuan (or \$11.5 billion).⁹

Spending on pump-priming measures was \$12 billion in 1998 and approximately \$7.2 billion in 1999, with government officials announcing plans to raise such spending back to \$12 billion in 2000 (Johnson and Brown 1999: A9). Such higher government spending is itself a response to rising unemployment and weak consumer spending. And, given that in December 1999 China experienced her 27th consecutive month of declining prices, inflationary pressures would hardly seem to have been a pressing concern at the end of the 1990s. Nevertheless, the government's budget deficit and debt levels will be impacted not only by the stimulus program but also by the reforms of the state-enterprise sector and the pressing need to recapitalize the state-owned banks.

The relation between inflation and fiscal pressures is unclear from the official budgetary data, which provide the basis for the budget deficit series in Table 1, because such data exclude loans by the People's Bank to the state enterprises. As discussed earlier, it was increased *off-budget* loans that apparently fueled rising fiscal pressures at the time of the 1988 and 1993 inflation jumps (World Bank 1995). Such off-budget loans also seem to have been a factor in the pre-reform period with People's Bank loans supplying 100 percent of working capital needs in the run-up to the 1961 inflation spike (Hsiao 1971). While the available data are hardly sufficient to prove the existence of a causal relation between fiscal pressures and inflation in China, history does suggest that the potential for new fiscal strains should not be taken lightly.

Confronting the Financial Problems of the Late 1990s

As direct finance from the People's Bank started to be replaced by heavy borrowing from state banks, the burden of supporting the largely loss-making state enterprise sector fueled a buildup of bad debts in the banking system. In the second half of the 1990s, the government finally took steps to address the growing losses of state enterprises and the bad debt problem in the nation's banks. At the 1997 15th Party Congress, President Jiang Zemin announced a bold

the creation of three new "policy banks" and increased autonomy for state commercial banks (World Bank 1996: 25–38).

⁹This estimate was reported on December 9, 1999 in *Muzi Dailynews*.

initiative that provided for the sale (or bankruptcy) of most of China's state enterprises. The authorities targeted 2,000 to 3,000 enterprises for bankruptcy, merger, or acquisition in 1998—a year when 49 percent of large and medium-size state enterprises suffered losses (World Bank 1999: 30). The layoffs associated with these moves have led to worker unrest, however, and Kathy Chen (1997: A16) points to a 50 percent increase in labor protests in 1997.¹⁰ In June 1998, Jiang Zemin gave a speech urging “caution in the sell-off of small state-owned companies, which were perceived as disturbing the orderly redeployment of laid-off state workers and harming workers' interests” (World Bank 1999: 31).

The financial weakness of the state enterprises prior to the 1997 initiative was reflected in an officially reported ratio of liabilities to assets that reached 85 percent in 1995. Lardy (1998: 39–43) argues that this ratio was itself considerably understated and equivalent to a better than 500 percent debt-to-equity ratio. The upshot of this is that, as state-owned enterprises borrowed to the hilt, the state banks that lent them the money were faced with vast levels of nonrecoverable loans. The financial burden on the economy arising from the state-owned enterprises is characterized by Dorn (1998: 133) in terms of a “terminal disease that is eating up China's scarce capital.” Lardy (1999: 34) judges that recapitalization of the financial system would require an injection equal to 25 percent of total loans outstanding. This would represent about \$260 billion constituting an estimated 27 percent of China's GDP. Lau (1999: 74) points out that even the People's Bank of China's own estimates amount to 20 percent of GDP.

The Chinese government issued \$32.5 billion in bonds in 1998 to help recapitalize the four state-owned banks. In 1999 the government established four financial asset management companies to purchase and manage bad loans from the state banks. The first of these companies, China Cinda Asset Management Company, was founded on April 20, 1999. When Cinda takes over a loan, the enterprise in question is to pay dividends to the asset management company instead of paying interest to the bank. The asset management company will then seek to recover the principal by either an initial public offering or by transferring the ownership. In September 1999 Cinda undertook China's first ever debt-for-equity swap (*Muzi Dailynews*, September 11, 1999).

¹⁰Lau (1999: 76) states that layoffs had reduced the workforce in the state-owned enterprises by a total of 20 million through the end of 1998.

The system of asset management companies is intended to strengthen the banks' balance sheets while also reducing the state enterprises' debt burden. For example, the October 1999 debt-for-equity swap agreement with Zhejiang Chemical Fibre United Group was to reduce the state-owned enterprise's debt-asset ratio from 94.3 percent to 45 percent (*Muzi Dailynews*, October 29, 1999). It appears, however, that the known bad debt has been compounded by embezzlement and accounting malpractices both within the state enterprises and the state banks that provided them with loans. According to Deputy Auditor-General Liu Jiayi, two of China's big four state commercial banks—China Construction Bank and the Industrial and Commercial Bank of China—"had overstated their assets by 200 billion yuan and had built up 200 billion yuan in off-book assets. A tenth of reported assets were of poor quality" (*Muzi Dailynews*, December 16, 1999).

The irregularities unearthed by the government's auditors are hardly encouraging news for banks that were already believed to be carrying nonperforming loans equal to as much as 10 times total bank capital and loss reserves (Naughton 2000: 154). The reforms aimed at gradually eliminating the burden of the loss-making state enterprises and employing the new system of financial management companies to deal with the bad debt problem are clearly steps in the right direction. But those reforms cannot be pursued without continuing economic costs associated with layoffs and rising unemployment on the one hand and a rising debt burden on the other.

Conclusion

The reform process stands at a critical stage as China enters the 21st century. According to the World Bank (1999: 50):

China's long-term fiscal sustainability is threatened by the contingent liabilities of the banking sector, the fiscal obligations arising from reform of state-owned enterprises and the social security system, and the unbalanced nature of fiscal relations between the central government and local governments. Long-term sustainability depends upon how the government addresses these problems.

Mounting fiscal pressures pose a danger of renewed inflation if the government is tempted to monetize new debt. That temptation should be resisted if China is to realize its long-term goal of sustainable growth and low inflation. The most pressing task is to restructure state firms and banks to increase efficiency. China's coming accession to the World Trade Organization is encouraging. Foreign competition

will be a breath of fresh air and help bring about the institutional changes necessary to ensure that markets advance and the Chinese people prosper in the 21st century.

References

- Burdekin, R.C.K. (1995) "Budget Deficits and Inflation: The Importance of Budgetary Controls for Monetary Stability." In T.D. Willett, R.C.K. Burdekin, R.J. Sweeney, and C. Wihlborg (eds.) *Establishing Monetary Stability in Emerging Market Economies*, 33–61. Boulder, Colo.: Westview Press.
- Burdekin, R.C.K., and Hu, X. (1999) "China's Experience with Indexed Government Bonds, 1988–1996: How Credible Was the People's Republic's Anti-Inflationary Policy?" *Review of Development Economics* 3 (February): 66–85.
- Burdekin, R.C.K., and Wang, F. (1999) "A Novel End to the Big Inflation in China in 1950." *Economics of Planning* 32: 211–29.
- Chen, B. (1997) "Long-Run Money Demand and Inflation in China." *Journal of Macroeconomics* 19 (Summer): 609–17.
- Chen, K. (1997) "Newest Reforms in China May Be the Hardest Yet." *Wall Street Journal*, 15 September: A14, A16.
- Ch'en, Y. (1984) *Ch'en Yun Wen Hsuan: 1949–1956 Nien*. Beijing: Hsin Hua Shu Tien Fa Hsing.
- China Statistical Yearbook* (1997–98) Beijing: State Statistical Bureau.
- Chung Kuo Shê Hui K'ê Hsüeh Yüan Chia Ko Kai Ko K'o T'i Tsu (1986) "Ch'i Nien Lai Chia Ko Kai Kê Tê Szü K'ao." In Chung Kuo Ching Chi T'i Chih Kai Ko Yen Chiu Suo (ed.) *Chung Kuo: Fa Chan Yü Kai Ko Chengdu*, People's Republic of China: Szü Ch'uan Jên Min Ch'u Pan Shê.
- Dorn, J.A. (1998) "China's Future: Market Socialism or Market Taoism?" *Cato Journal* 18 (Spring/Summer): 131–46.
- Hsia, R. (1953) *Price Control in Communist China*. New York: Institute of Pacific Relations.
- Hsiao, K.H. (1971) *Money and Monetary Policy in Communist China*. New York: Columbia University Press.
- Imai, H. (1994) "Inflationary Pressure in China's Consumption Goods Market: Estimation and Analysis." *The Developing Economies* 32 (June): 127–54.
- International Monetary Fund (1998) *International Financial Statistics Yearbook*. Washington, D.C.: IMF.
- International Monetary Fund (1999) *International Financial Statistics*. Washington, D.C.: IMF.
- Johnson, I., and Brown, O. (1999) "China's Economic Growth Slows to 7.1% Despite Export Rebound." *Wall Street Journal*, 30 December: A9.
- Kahn, J. (1994) "Rebellion Grows in China's Cotton Fields." *Wall Street Journal*, 15 November: A20.
- Lardy, N.R. (1998) *China's Unfinished Economic Revolution*. Washington, D.C.: Brookings Institution Press.
- Lardy, N.R. (1999) "The Challenge of Bank Restructuring in China." In

- Strengthening the Banking System in China: Issues and Experience*, 17–39. Policy Paper No. 7. Bank for International Settlements, Basel, Switzerland (October).
- Lau, L.J. (1999) “The Macroeconomy and Reform of the Banking Sector in China” In *Strengthening the Banking System in China: Issues and Experience*, 59–89. Policy Paper No. 7. Bank for International Settlements, Basel, Switzerland (October).
- Ma, H. and Kao, S.C. (1990) *Chung Kuo Tung Huo P'eng Chang Yen-Chiu*. Beijing: Kai-Ko Ch'u Pan Shê.
- McKinnon, R.I. (1994) “Financial Growth and Macroeconomic Stability in China, 1978–1992: Implications for Russia and Other Transitional Economies.” *Journal of Comparative Economics* 18 (June): 438–69.
- Muzi Dailynews* (Beijing), various dates (<http://dailynews.muzi.com>).
- Naughton, B. (2000) “Financial Development and Macroeconomic Stability in China.” In B. Chen, J. K. Dietrich, and Y. Feng (eds.) *Financial Market Reform in China: Progress, Problems, and Prospects*, 143–69. Boulder, Colo.: Westview Press.
- Oppers, S. E. (1997) “Macroeconomic Cycles in China.” Working Paper No. 97/135. International Monetary Fund, Washington, D.C., (October).
- Peebles, G. (1991) *Money in the People's Republic of China: A Comparative Perspective*. Boston: Allen & Unwin.
- Pien Hsieh Tsu (1986) *Hsin Chung-Kuo Jo Kan Wu Chia Chuan Ti Shih Liao*. Changsha: Hu Nan Jen Min Ch'u Pan Shê.
- Shih Chieh Jih Pao (World Daily)* (1996) “Ch'ung Ch'ing Wu Chia P'ing Yi Hou Shih Hsiao.” 22 February.
- Sung, K.C. (1995) “Li Lü, Tu'ng Huo P'eng Chang Yü Ch'i Yü Ch'u Hsü Ch'ing Hsiang,” *Ching Chi Yen Chiu*, No. 7: 3–10.
- Wong, C.P.W.; Heady, C.; and Woo, W.T. (1995) *Fiscal Management and Economic Reform in the People's Republic of China*. New York: Oxford University Press.
- World Bank (1995) *China: Macroeconomic Stability in a Decentralized Economy*. Washington, D.C.: World Bank.
- World Bank (1996) *The Chinese Economy: Fighting Inflation, Deepening Reforms*. Washington, D.C.: World Bank.
- World Bank (1999) *China: Weathering the Storm and Learning the Lessons*. Washington, D.C.: World Bank.