Universe
Scientific Publishing

The Factors of a Large Change in Consumer Price Inflation and the Implications for Policy in China

Yanjia Zhang
University of Manchester, Chengdu 610000, China.

Abstract: This essay is broadly divided into three parts. The first part analyzes the argument that China's rapid inflation spike is caused by investment and property prices and verifies this result with a complete series of Granger Causality tests. The second part critiques and adds to the arguments of the paper that government fiscal and monetary policies stimulated a spike in investment and property prices, which in turn led to a significant rise and fall in inflation over a 15 years period. Linking CPI to GDP, the 15 years are divided into three time periods and the causes of inflation are analyzed explicitly in the context of current policies, thus validating the argument.

Keywords: Price Inflation; Monetary Policies

1. Introduction

China's inflation rate has shifted dramatically in recent years. Following 1985, China experienced a period of significant inflation, which peaked at 18.8 percent in 1988. By 1995, the rate of inflation had climbed to almost 17.1%. After then, by the year 2000, China's inflation had moderated. The consumer price index progressively leveled off after two big ups and downs over that period, a dramatic change highly reflective of the world. As a result, this paper chose annual data from 1985 to 2000 for examination. Yu and Luo (2013)[8]ascribe this to investment; however, Zhang et al. (2013) [9]claims that rising property prices are a crucial source of inflation. As a result, before I provide my findings, this essay will describe how these two papers arrived at their results.

2. Analysis of Existing Study

Yu and Luo (2013)[8] provide a well-thought-out argument that investment was the cause of inflation in China from 1985 to 2000. To support their position, the researchers define the monetary cycle in an endogenous money framework and undertake an empirical analysis using linear regression, with the Granger Causality test used to determine the presence of long-term correlations between the variables.

Then, the following econometric model: $Y_t=A_1+A_2(L)Y_{t-1}+A_3(L)D_t+\varepsilon_t$, where Y_t represents the endogenous variables, including investment and inflation. The capital formation rate (i), net export formation rate (nx) and CPI were then regressed over the period 1985 to 2000, and after testing it was discovered that the model's characteristic roots were all within the unit circle, indicating that the model was stable, and Figure 1 was produced as a result. After demonstrating that the first-order autoregressive model was stable, Figure 2 was created using a second-order lagged model. As a result, it was essentially determined that the rate of capital formation was the source of inflation.

Figure 1 Lag First Order Granger Causality Test

Equation	Exclude	chic2	df	P
D_i	nx	2.3525	1	0.125
D_i	cpi	1.9361	1	0.164
D_i	All	7.2828	1	0.026
nx	D.i	.07486	1	0.784
nx	cpi	1.3603	1	0.243
nx	All	1.4709	2	0.479
cpi	D.i	3.243	1	0.072
cpi	nx	1.79	1	0.181
cpi	All	5.8226	2	0.054

Figure 2 *Lag Second Order Granger Causality Test*

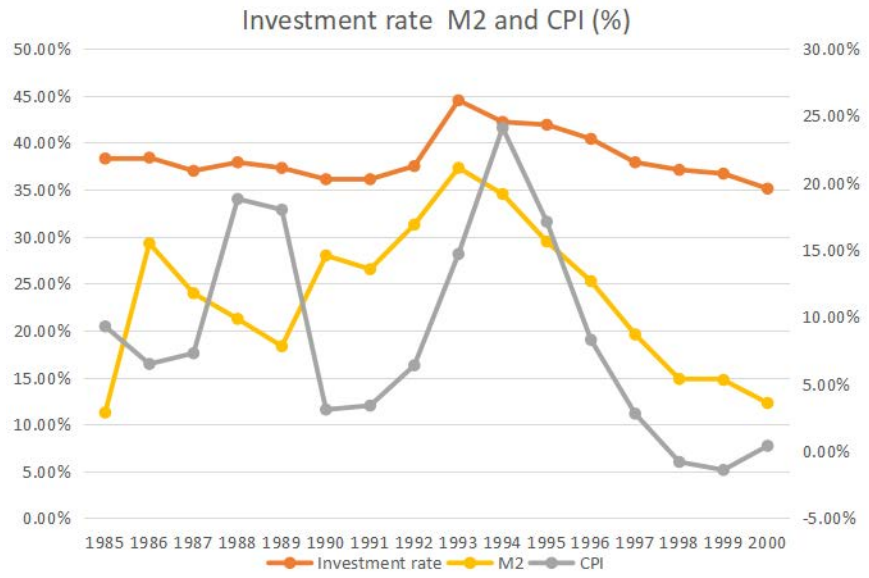
Equation	Exclude	chic2	df	P
D_i	nx	1.9302	2	0.381
D_i	cpi	3.4114	2	0.182
D_i	All	8.2055	4	0.084
nx	D.i	2.6703	2	0.263
nx	cpi	2.227	2	0.328
nx	All	4.468	4	0.346
cpi	D.i	8.0522	2	0.018
cpi	nx	7.3644	2	0.025
cpi	All	10.28	4	0.036

Finally, using an event vector autoregressive model that incorporates exogenous temporal shocks demonstrates that inflation rises when investment rises exogenously, adding to the evidence that investment is the source of inflation. As a result, the entire technique of the researchers' arguments is precise and sensible, with layers of growth, the construction of various models to constantly check the concepts offered, and ultimately, the steady outcomes of each model, thus comparing the exact findings.

3. Improvements and Implication

While the argument for this study appears to be reasonable, I believe that the core causes of inflation in China are variables affecting investment and property prices. Both studies, however, concentrate on the external manifestations of inflation. While rising investment and real estate prices are the primary sources of inflation, Figure 7 demonstrates how both are influenced significantly by China's macroeconomic policies. Thus, I argue that the fundamental driver of inflation over the last 15 years has been the government's expansionary monetary and fiscal policies to achieve high economic growth and full employment, which included massive monetary issuance, low-interest rates, and accommodative credit policies. These policies boosted investment and increased the prices of real capital goods, represented by real estate, first in the asset market and then in other commodities(Osorio & Unsal, 2013)[5].

Figure 4 Investment Rate, M2 and CPI



Source: National Bureau of Statistics.

Therefore, studying the Chinese government's policies and controls over the last 15 years provides objective evidence for my position. When the economic growth and inflation rates of China are plotted against one another since the reform and opening up, it is clear from Figure 8 that both have followed a similar trajectory, with the inflation rate trailing the GDP growth rate by one year. It is obvious that inflation and GDP growth rates are highly correlated, and that during each economic cycle, when GDP growth hits its highest, inflation also reaches its top the following year (Zhang et al., 2013)[2].

China witnessed high consumer price inflation in 1985, growing at a pace of 9.3 percent, after hitting an economic peak in 1984 with a GDP growth rate of 15.3 percent. This was because the Chinese government established the audacious objective of "quadrupling" the economy in the early 1980s, which fostered fast expansion. Additionally, China issued 26.2 billion in cash in 1984, more than three times the budgeted amount. By 1985, social investment in fixed assets had increased to 254.3 billion yuan, a 38.8 percent rise over the previous year, resulting in the first peak of excessive investment since the reform and opening up. Simultaneously, home values have begun a rapid ascent. GDP growth reached 15.3 percent in 1984 and 13.2 percent in 1985 as a result of this macroeconomic policy, resulting in a more severe inflation crisis(Liu & Luo, 2015)[4].

China also experienced high inflation from 1988 to 1989, with 18.8% and 18.0% respectively. Inflation in 1985 was followed by a series of tightening macro-control measures, which resulted in a sharp reduction in prices and a sharp decline in economic growth in early 1986, with industry seeing negative growth in February. This was followed by a gradual increase in currency issuance beginning in early 1986. By 1988, a dual-track system and price reforms had been proposed, and in June of that year, the Chinese government formally decided to reform its price and wage policies, resulting in rapid inflationary expectations and a sharp rise in prices, with the national retail price index climbing to 26% in 1988, up from 12% the previous year (Schwartz, 1998)[6]. Additionally, social investment in fixed assets totaled 475.4 billion yuan in 1988, a 25.4 percent increase over the preceding year. China's economy grew rapidly as consumption and investment expanded concurrently, with GDP growth hitting 11.5 percent in 1987 and 11.3 percent in 1988. Rapid economic development resulted in inflation, which climbed to another 18.8 percent and 18.0 percent in 1988 and 1989, respectively.

To rein in the spiraling inflation, the government decided in September 1988 to pursue a series of solid macroeconomic reforms, which quickly brought inflation under control, but at a high price(Kojima et al., 2005)[3]. Monetary and financial variables reached a bottom in the third quarter of 1989, while markets weakened, industrial production decreased, companies were underemployed, employment pressures mounted, the fiscal position deteriorated, and the economy entered recession (Ye et al., 2013)[7]. As a result, in 1992, the government called for increased reform and opening and the establishment of a socialist market economy, resulting in a "business boom" throughout China and a general overheating of investment and consumption, rapidly propelling the economy upward. Between 1992 and 1994, GDP was 14.1 percent, 13.1 percent, and 12.6 percent. However, consumer price inflation began to grow concurrently, hitting 14.7 percent, 24.1 percent, and 17.1 percent in 1993, 1994, and 1995, respectively, and inflation stayed elevated for an extended period, making it difficult to control in the short term (Jin & Zang, 2013)[2].

In summary, the government's macroeconomic and monetary policies are the critical driver of consumer price inflation and that these policies directly contribute to inflation via investment and property prices.

Conclusion

In conclusion, this essay is broadly divided into three parts. The first part analyzes the argument that China's rapid inflation spike is caused by investment and property prices and verifies this result with a complete series of Granger Causality tests. The second part critiques and adds to the arguments of both papers that government fiscal and monetary policies stimulated a spike in investment and property prices (He & Zou, 2016)[1], which in turn led to a significant rise and fall in inflation over a 15 years period. Linking CPI to GDP, the 15 years are divided into three time periods and the causes of inflation are analyzed explicitly in the context of current policies, thus validating the argument.

References

[1] He, QC., & Zou, HF. (2016). Does inflation cause growth in the reform-era China? Theory and evidence. International Review of Economics & Finance, 45, 470–484.

[2] Jin, W., & Zang, Q. (2013). Impact of change in exchange rate on foreign direct investment: Evidence from China. Lingnan Journal of Banking, Finance and Economics, 4(1), 1.

[3] Kojima, R., Nakamura, S., & Ohyama, S. (2005). Inflation dynamics in China [PDF] (Bank of Japan Working Paper Series No. 05-E-9).

[4] Liu, RH., & Luo, YF. (2015). The inspiration of reducing frictionsof factor inputs on avoiding middle-income trap in China. Hebei Academic Journal, 04.

[5] Osorio, C., & Unsal, DF. (2013). Inflation dynamics in Asia: Causes, changes, and spillovers from China. Journal of Asian Economics, 24, 26–40.

[6] Schwartz, AJ. (1998). Why financial stability depends on price stability. In G. Wood (Ed.), Money, prices and the real economy (Vol. 34, p. 41). Edward Elgar.

[7]Ye, YF., Cao, H., Bai, L., Wang, Z., & Shao, YH. (2013). Exploring determinants of inflation in China based on L1-∈-twin support vector regression. Procedia Computer Science, 17, 514–522.

[8] Yu, Z., & Luo, Y. (2013). Re-examining the nature of China's currency and the causes of inflation. Management World, 10(19-34).

[9] Zhang, C., Song, J., & Breece, J. (2013). Understanding the evolving inflation process in China: 1997–2011. The Social Science Journal, 50(3), 331–337.