

Openness and Economic Performance: A Comparative Study between China and Emerging Industrial Economies in Asia

Yang Xinagqin

Jiangmen Polytechnic, Guangdong Jiangmen 529000

Abstract: By comparing the development experience of China and the emerging industrial economies (NIEs) in Asia, it is believed that China, as the world's largest developing economy, has a huge impact on the world economy. In the implementation of the "gradual" opening-up policy, China's foreign exchange system, international trade, and foreign direct investment (FDI) are gradually achieving liberalization. Attempting to explore how this "gradual" process of opening up has affected the development of China's economy.

Key words: China; Emerging industrial economies in Asia; Economic performance

1 Introduction

Since China implemented the reform and opening up policy in 1978, remarkable achievements have been made in both economic development and social progress. This growth has shown astonishing similarities in many aspects with the situation of emerging industrial economies (NIEs) in Asia from the 1960s to the 1990s. Although China is still a relatively poor country in terms of per capita GDP, as the largest industrial economy, its sustained and rapid economic growth has had a huge impact on the global economy, especially in the Asia Pacific region.

The success of China is attributed to Deng Xiaoping's reform and opening up policy. The economic reform policy first began in rural areas and agriculture. In the late 1970s, the rural reform mainly focused on the household contract responsibility system, which significantly improved agricultural production efficiency. The development of agriculture provided abundant food and raw material resources for the development of industry and cities. In less than 10 years of farming.

In the industrial reform, the majority of the rural population was able to escape absolute poverty. In cities, the contracting system has not created the same miracle, and China has begun to search for a new development model, but the focus is on expanding openness and market-oriented reform. Among them, the open policy is mainly reflected in the transformation from a policy primarily based on self-reliance and supplemented by imports to an export-oriented policy, actively introducing foreign technology, and participating in international business practices. In terms of market-oriented reform, the planned economy with a mandatory color has gradually been replaced by free market competition, and the level of commodity prices depends on the market rather than planned specifications. The ideological reform has encouraged the development of non-state-owned economy, causing private, collective, and foreign-funded enterprises to flourish, thereby improving the efficiency of state-owned enterprises and productivity.

An important aspect of market liberalization is the reform of the foreign exchange market. Unlike other emerging industrial economies, the Chinese yuan remained an inconvertible currency for more than a decade from the 1970s to the late 1980s and was overvalued for a long time. After 1979, the RMB began to gradually depreciate. By 1994, the RMB had settled internationally. Free

exchange was achieved on the current account in China, and in January 1994, the dual track currency exchange system implemented since 1979 was abolished and replaced with a single exchange system. If the official exchange rate is not changed to a free market equilibrium exchange rate, it may be difficult for China to achieve such great success in international trade and attracting foreign investment, which is due to the export share and foreign direct investment.

The rapid growth of direct investment (FDI) is what enables the economy to sustain growth for a long period of time. It should be emphasized that the success of China's economic reform depends to a large extent on the Chinese government's strong control over the time, order and scope of liberalization, which comes from Deng Xiaoping's pragmatism and the philosophy of gradual reform. A typical example of China's gradual reform is the partial opening of the stock and foreign exchange markets. In the foreign exchange market, although the RMB has gradually depreciated and a unified exchange rate has been introduced since 1994, it is still not freely convertible in capital account transactions, and the exchange of the RMB to foreign currencies is still subject to strict control. In the stock market, the stocks issued by the stock exchanges in Shanghai and Shenzhen are divided into two types: A-shares and B-shares. Prior to the introduction of OFII, foreign investors could only enter.

There are extremely strict restrictions on the companies and the number of B-share issuances that can be traded. This control mechanism effectively protects the foreign exchange and stock markets from speculative attacks from foreign investors and short-term capital. It was this gradual and pragmatism type of opening policy that enabled China to avoid the economic crisis that occurred in 1998, which caused many emerging Asian economies to stagnate, was spared.

In recent literature, many studies have examined the relationship between openness and economic performance in Asian countries. Many studies have found that FDI and international trade have a positive impact on economic growth (Pomfret, 1997, Harold, 1995, and Lardy, 1995, studied China; Sengupta and Espana, 1994, studied South Korea; Yue, 1999, studied Southeast Asian countries; and Dowling, 1997, studied high growth economies in Asia; Greenaway, 1998, studied general developing countries). Starting from the new theory of endogenous growth, FDI includes an important component, namely the transfer and spillover of

technology. Export orientation forces producers to cope with international competition. In emerging industrial economies, outward looking strategies and relatively free labor and capital markets are closely linked. Summarizing the development experience of these emerging industrial economies, China has also begun to stimulate exports by emphasizing labor-intensive manufacturing, and thus tap into its competitive advantage. Compared to most internally oriented Latin American countries, China and emerging industrial economies have significant advantages in market development in terms of labor and capital markets, debt, budget deficits, and economic systems.

Many recent econometric analyses have focused on understanding the causal relationship between independent and dependent variables. For example, is FDI promoting GDP growth or GDP promoting FDI growth. Most empirical results support the argument that FDI (or trade) can promote output growth. In China, as foreign exchange policy is a prerequisite for rapid growth of FDI and exports, it means that the exchange rate system inevitably plays a very important role in economic performance. To prove this, we established an econometric economic model and used China's. The relevant data provided by the statistical departments of various provinces during the year 2000 were used to examine the relationship between real exchange rates, FDI, and exports, as well as how they drive economic growth.

The structural arrangement of the remaining part of the article is as follows: Section 2 evaluates the economic performance of China and other emerging industrial economies over the past 20 to 30 years by comparing them with other countries in the world; The third section is an analysis of relevant empirical research literature on the relationship between openness and economic growth; The fourth section discusses the Asian economic crisis and its recovery, aiming to emphasize that despite the economic crisis, the remarkable achievements of these emerging industrial economies cannot be ignored, and their successful development experience based on openness and significant investment in material and human capital still has important reference significance for other developing countries in the future. After analyzing China's reform experience in foreign exchange and stock markets, it also emphasized the importance of pragmatism and gradualism in opening up and financial reform; The final section is the main conclusion of the study.

2 Economic Performance and Openness: A Short Review

According to the latest statistical data, China is classified as a middle-income economy by the World Bank, but compared to the first tier emerging industrial economies such as Taiwan, South Korea, Hong Kong, and Singapore, China is still a poor country. For example, in 2000, China's nominal per capita national income was \$840, only 3.2%, 16% of the world average 3%. Even using GDP calculated in PPP, China's per capita national income is only 15.3% and 53% of the world average 6%. However, China and other emerging industrial economies share many common characteristics in terms of openness, investment in material and human capital, and both governments have implemented effective management policies to some extent. This is the fundamental difference between China and other emerging industrial economies in Asia and many countries in Africa, Latin America, and South Asia.

In 1965. In 1997, the annual per capita GNP growth rate of

emerging economies in Asia increased from 4.5% in Malaysia 1% to 7% in Taiwan 5%, which is 1.4% creates a sharp contrast. After the reform period after 1978, China's economic growth was almost unparalleled in the world, with its Gross Domestic Product (GDP) in the past 20 years (1978). In 1998, the growth rate exceeded four times, with per capita disposable real income increasing more than three times in urban areas and more than four times in rural areas. Since 1994, China has become the second largest recipient of foreign direct investment after the United States. The latest data shows that China has become the world's fourth largest trading country, ranking only 23rd in 1978 (People's Daily, 2000). Affected by the Asian economic crisis, China's exports began to plummet vertically from the second half of 1998 to the first half of 1999, but rebounded strongly from the mid-1999.

In 1999, China's total exports reached a new high, reaching \$1949 billion, an increase of 6.5% compared to 1998 1%; The import volume was 165.7 billion US dollars, a year-on-year increase of 1.8% 2%. In recent years, especially since China joined the WTO in 2001, China's total foreign trade has grown by an average of over 30% annually, reaching over \$1200 billion in 2004, thus establishing China as a locomotive for world economic development.

The biggest commonalities between China and emerging economies in Asia in terms of economic success are high savings rates, export driven, and significant investment in material and human capital. The high savings rate may reflect the cultural traditions of the people of China and East Asia, rather than the results of government policies. In developing countries, traditional culture has a great help in capital accumulation and education. All emerging economies in Asia have a savings/GDP ratio of over 30%, with a global level of 22% and a low income country level of 17%. In Singapore and China, the savings rate is as high as 40% 50%. In 1965. During 1997, most emerging Asian economies and China maintained a level of 7.7% to 10%. The annual average growth rate is 9%, while the growth rate of low-income countries is only 3.9%, with a world average growth rate of 3.2%.

According to the endogenous growth theory, human capital investment and material investment are equally important. The accumulation of human capital is reflected in some fields, especially in healthcare and education. The improvement of people's health level has led to a significant increase in average life expectancy, while the mortality rates of children and infants have significantly decreased. Compared to other low-income countries, China and emerging economies in Asia have significantly higher average life expectancy and lower child mortality rates. In education, the popularization of primary and secondary education has been very successful. By 1997, almost all Chinese children had access to primary education, and over 70% (only 46% in 1980) of eligible children had access to secondary education, while in low-income countries, the secondary school enrollment rate was only 43%. The popularization of primary and secondary education in China and emerging economies in Asia has significantly reduced adult illiteracy rates. In South Korea and Singapore, illiteracy among the younger generation had almost disappeared in the late 1990s, while illiteracy rates among the corresponding age groups in China and emerging Asian economies decreased to 1% 3%, while in low-income countries it is 32%.

Another common feature of China and emerging economies in Asia is their close integration with the world economy, which is reflected in their export driven development strategy and attracting

foreign investment. In terms of trade to GDP ratio, Hong Kong and Singapore are the most open economies, with trade volume two to three times that of GDP calculated in PPP. The trade/GDP ratio of

other emerging Asian economies is also high, from Thailand's 16 Ranging from 9% to 90% in Malaysia. These ratios are significantly higher than the average level of low-income countries (see Table 1).

Table 1 Statistical table of the comprehensive international economy

Countries and regions	Trade in goods as a percentage of the PPP GDP		Percentage of foreign direct investment (FDI) in PPP GDP		Foreign direct investment (FDI) (USD 1 billion)	
	1987	1997	1987	1997	1990	1997
China 6.8	8.5	0.2	1.2	3.5	44.2	
Hong Kong, China 125.0	250.4	
Indonesia 11.1	13.7	0.1	0.7	1.1	4.7	
Japan 20.8	25.0	1.2	1.0	1.8	3.2	
Korea 36.6	44.9	0.5	1.2	0.8	2.8	
Malaysia 49.4	90.0	0.7	2.9	2.3	5.1	
Singapore 200.7	290.7	10.0	14.3	5.6	8.6	
Thailand 16.9	29.7	0.4	1.0	2.4	3.8	
And 7.0 in low-income countries	8.4	0.1	0.3	1.1	10.6	
Middle-income countries 10.3	18.6	0.3	1.4	22.6	150.0	
High-income countries 27.4	38.7	2.2	3.1	167.0	233.9	
The world average 20.6	29.6	1.5	2.4	192.7	394.5	

From the perspective of international trade, China is still far less open than other emerging Asian economies. In 1997, China's trade/PPP GDP ratio was only 8.5%. The data in Table 1 may underestimate China's openness in two aspects. Firstly, China is a large country, making it difficult or impossible to achieve the same level of trade/GDP ratio as small urban economies such as Hong Kong and Singapore; Secondly, the GDP value is calculated using purchasing power parity (PPP). If nominal GDP is used, China's trade/GDP ratio in 1997 should be 31%, compared to 8% in 1977. 81% has seen a significant improvement.

Another open indicator is the attraction of foreign investment. In 1978, China had only a very small amount of foreign direct investment (FDI), but by 1995, China had become the second largest recipient of foreign direct investment after the United States. The fastest growing stage of foreign direct investment in China was in the late 1980s and 1990s. From 1987 to 1997, the FDI/PPP GDP ratio increased from 0.2% to 1.2%, a 6-fold increase, and the total inflow of foreign direct investment increased from 3.5 billion US dollars in 1990 to 44.2 billion US dollars in 1997, a 13-fold increase. In 1998, China received 28% of the total amount of foreign direct investment absorbed by all developing countries. China's attraction to foreign investment follows the development trajectory of Malaysia, South Korea, and Singapore. In summary, over the past 30 years, China and emerging economies in Asia have been more open to attracting foreign direct investment compared to low-income and middle-income countries.

3 How Openness Affects Growth

3.1 Growth and Openness: An International Perspective Sengupta and Espana (1994) conducted a related study on NIEs countries.

They used time series data to estimate an expanded Cobb-Douglas production function that included exports as an explanatory variable for GDP growth. In their sample, they included two emerging industrial economies in Asia (South Korea and Taiwan), three mature industrialized countries (Japan, Germany, and Belgium), and one developing economy (the Philippines). The regression results indicate that there is a significant positive correlation between exports and GDP growth in all samples except Japan. In their model, FDI and foreign exchange rates were not included, which play a particularly important role in the transition process of the Chinese economy. In the next section, we will expand the model on a Chinese basis to include these variables.

Recently, some studies on FDI have mainly focused on how it is determined, without linking it to economic growth. Lu et al. (1997) showed that FDI is determined by GDP, international trade, and other variables. More descriptive studies have shown that FDI plays an important role in China's economic activities, but there has been no quantitative research on the relationship between FDI, exports, and economic growth. Pan (1998) found through a cross-border study that there is a positive correlation between the ratio of trade to GDP and the ratio of FDI to GDP in APEC economies. The three regions of

NIEs(Singapore,Hong Kong,and Malaysia)have the highest ratios of foreign direct investment to GDP and trade to GDP.

3.2 Growth and Openness:Evidence of China's Economic Development

Before the economic reform,the two main characteristics of China's development strategy were import substitution and strict price control.For example,from the reform of China's economic system in 1978 to the end of 1982,there was very little foreign direct investment in the past four years;In 1983,the total amount of FDI was only 6 400 million US dollars,but gradually increased to reach 43 700 million US dollars.After Deng Xiaoping's southern tour in 1992,there was a sudden increase in China's foreign direct investment,with the total flow jumping to\$11.3 billion that year and reaching\$27.5 billion in 1993,\$33.8 billion in 1994,and\$44.8 billion in 1998.

It is obvious that the history of foreign direct investment in China is shorter than that of other NIEs countries.In addition,FDI is mainly concentrated in some provinces along the southeast coast(Guangdong,Shanghai,Tianjin,Fujian,Shandong,Jiangsu,Hainan,Liaoning).In 1995,the eastern region accounted for over 88%of total foreign direct investment,with Guangdong alone accounting for 27%.One important reason for the imbalanced distribution of FDI across regions is that China's early economic reforms were mainly concentrated in special economic zones.In 1980,they were mainly concentrated in four special economic zones in Fujian and Guangdong.By 1984,14 coastal cities were opened,Hainan Island was opened in 1988,and Shanghai Pudong Development Zone was opened in 1989.Of course,there are fundamental reasons why China chooses coastal cities as development zones.Compared to inland areas,coastal areas have a stronger agricultural and industrial foundation,more convenient transportation systems,better environment and human resources,and most importantly,they are more accessible to some of China's largest investors,especially Hong Kong.

China's efforts to promote exports are in line with its policy of opening up its market to foreign investors and have increased its openness.At the beginning of this export-oriented and economic reform,China emphasized that foreign-funded enterprises(wholly foreign-owned enterprises,Sino foreign joint ventures,Sino foreign cooperative enterprises)must use a large portion of their products for export purposes.Therefore,many foreign-funded enterprises in China's special economic zones often focus on export processing and manufacturing,and this investment policy has achieved remarkable results.Firstly,China's total export volume rapidly increased from 18.2 billion US dollars in 1980 to 194.9 billion US dollars in 1999;Secondly,the proportion of manufacturing exports to total exports increased from 49.5%in 1980 9%increased to 86%in 1997 9%.The rapid expansion and significant changes in exports are very similar to the export performance of South Korea and Taiwan from the 1960s to the 1970s;Thirdly,foreign-funded enterprises have played an important role in China's export drive.Their export volume was almost negligible in the first half of the 1980s,but by 1995 it had reached 49.6 billion US dollars,accounting for 31%of the total export volume 7%.

Although China's success in attracting foreign direct investment(FDI)and promoting exports has multiple reasons,it is worth noting that the gradual reform of the exchange rate market has played a crucial role.Without the depreciation of the

renminbi,the Chinese market could not have attracted foreign investment so much.By the late 1980s,the Chinese government had established some official exchange markets to promote the redistribution of foreign exchange and established a dual track exchange rate system.This exchange market is through official channels,allowing investors to exchange foreign currency into RMB at a higher exchange rate than the official exchange rate.This is the first important step taken by the government in attracting foreign investment and stimulating exports.Due to the rapid growth of foreign exchange reserves in the early 1990s,the dual track system was abolished in January 1994,and the exchange market was also abolished.So far,the RMB has gradually depreciated to the level of market equilibrium,and the official exchange rate has declined from 1978 Year 1 68 yuan is exchanged for 1 US dollar to 8 in 1995 321 yuan has depreciated by nearly 400%to 1 US dollar.After adjusting using the consumer price indices of the United States and China,the real exchange rate of the RMB depreciated by over 200%during the same period.

Next,let's take a look at growth theory.China has carried out systematic reforms in the foreign exchange market,with the same goal of promoting exports and attracting FDI,which is to create a more conducive environment for economic growth.If we think that economic growth is the core of this model,then output is determined by material input(physical capital and labor force),internal production environment(human capital,transportation,institution,etc.)and external environment(FDI,export and exchange rate mechanism).The economic growth model can be illustrated by:

Output(CDP)is basically determined by two material inputs:labor and capital.However,the efficiency or economic performance of investment is mostly determined by two sets of factors,external and internal.External factors are linked to openness,including FDI,exports,and foreign exchange mechanisms;Internal factors include human capital,infrastructure construction,geography,and systems(such as government policies,laws and regulations,etc.).However,internal and external factors vary among different countries,resulting in significantly different economic performance.Recent cross-border studies have shown that human capital,savings,and population growth are the three main reasons for differences in economic growth between countries.However,in many studies across countries or regions,it is rare to consider and analyze all internal and external factors.This may be due to certain technical barriers,such as multicollinearity and the endogeneity of variables,which make it difficult to analyze in a single regression model.To overcome these issues,we used three regression models(FDI,export,and CDP as dependent variables)instead of a single regression equation,and the three models were subjected to regression analysis in a seemingly unrelated simultaneous equation.At the same time,we also use the dynamic system method proposed by Arellano and Bond(1998)to add appropriate tools to dynamic panel data.Because it is difficult to obtain comparable data for different countries,we used panel data of Chinese provinces from 1978 to 2000 to estimate.Due to significant differences in openness and economic performance among provinces,each province can be considered an independent economy.

The empirical results are presented in Table 2.Details such as data,estimation methods,and model descriptions are explained in the appendix.We will only analyze the results here.

CDP is seen as a function of capital savings,labor,human

capital, real exchange rates, FDI, exports, and transportation, and includes a dummy variable representing the economic region (eastern), a dummy variable representing abnormal economic growth caused by Deng Xiaoping's southern tour from 1992 to 1995, and a time trend variable.

The results show that besides capital and labor, both internal and external factors have a significant impact on China's CDP. For external factors, the impact of exports and real exchange rates is greater than the impact of FDI on CDP, and the output elasticity of exports exceeds 0.11. The output elasticity of the real exchange rate exceeds 0.10. The output elasticity of FDI is lower than 0.01; For internal factors, human capital has a greater impact on CDP than transportation and geographical distribution, and the output elasticity of human capital is 0.054. The impact of geography is not significant, which may be because regional productivity differences have been largely explained by other external and internal factors. The regression coefficient for the time trend coefficient shows that the average annual Hicks neutral technological progress is 1.1%, indicating that there was a macro productivity shock with unchanged geographical distribution during the study period.

Exports are seen as a function of CDP, real exchange rates, geography, and lagged dependent variables. Dummy variables representing the period from 1992 to 1995 are also included. All explanatory variables are significant at the 5% level. According to the regression results of CDP, it is clear that there is a mutual influence between exports and CDP. The long-term elasticity of exports regarding CDP is 0.89, which means that under other unchanged conditions, a 10% increase in CDP will lead to an 8% increase in exports. The real exchange rate is another important factor affecting exports, in other words, without the reform of the exchange rate market, China's exports will be in a very unfavorable position. Although regional factors are not significant in the CDP equation, their impact on exports is significant, indicating that the eastern region has a stronger export orientation than the inland region. FDI is seen as a function of CDP, real wages (nominal wages adjusted for productivity), real exchange rates, transportation, human capital, geography, and lagged dependent variables, representing the sub variables for the period 2011 to 2015, which are also included. FDI, like exports, is mainly determined by GDP, with a long-term elasticity of 0.8915. The real exchange rate is also an important factor affecting FDI. Regional factors are also significant, indicating that the eastern region is more successful in attracting FDI compared to other regions. The impact of human capital and wages on FDI is positive, but not significant. This means that during the data period, the difference in wages between different provinces is not a significant factor in attracting foreign investment, and the difference in wages may only reflect changes in labor quality.

In the model, the real exchange rate is considered as an exogenous variable, and the results show that it has a significant impact on the three endogenous variables of FDI, exports, and GDP. It is obvious that the gradual depreciation of the RMB towards the real equilibrium exchange rate during the research period is an important reason for China's successful attraction of foreign investment, promotion of exports, and stimulation of economic growth.

There is a simultaneous mutual influence relationship between FDI, exports, and GDP. The inflow and export of FDI have stimulated GDP growth; On the contrary, the growth of GDP provides a solid foundation for attracting FDI and promoting exports. The mutual

influence of these three variables forms a cycle between openness and growth, where greater openness will lead to higher growth.

4 Conclusion

This article compares and analyzes the economic performance of China and other emerging industrial economies in Asia. Undoubtedly, China and emerging industrial economies in Asia share some common characteristics in their development strategies. The most important feature among them is openness, including attracting foreign direct investment (FDI), as well as export promotion and financial market reform. In China's practice, the gradual depreciation of the renminbi is a prerequisite for its success in attracting FDI and promoting exports. The empirical results show a clear circular positive correlation between GDP, FDI, exports, and foreign exchange policies.

In addition to openness, China and emerging industrial economies in Asia have some other common characteristics, especially savings and investment in material and human capital. All of these economies, except for the crisis of 2019, have made significant economic and social progress over the past 38 years: GDP growth continues to exceed the world average, people have access to more education, life expectancy is also higher, and child and infant mortality rates are lower. It is precisely economic and social progress that enabled China and emerging industrial economies in Asia to quickly recover from the unexpected and highly destructive crisis of 1997-1998. Of course, there are also some fundamental issues in China and emerging industrial economies in Asia, especially in financial markets where corruption, nepotism, and financial regulation have become the main reasons for economic instability and cyclical decline. The emerging industrial economies in Asia have opened their financial markets to foreign investors, but lack effective supervision and control mechanisms for short-term capital flows, which has become a major cause of economic crises. China's pragmatism and gradualism are obviously more successful in defending against similar crises. Although China has been very successful in economic growth, there are still some serious problems, such as inefficient and always losing state-owned enterprises, financial institutions plagued by debt, corruption and crony capital, uneven development between regions, environmental recession, and income growth inequality, which greatly reduce the ability to maintain high economic growth and avoid large-scale economic recession. However, the experience and lessons learned from countries facing economic crises are very valuable for future economic development, and one important lesson is that the timing and scope of financial reform need to be carefully planned. China joins WTO. It means that we must be more open. The real challenges come from the most vulnerable sectors of the economy: banking, insurance, capital and technology intensive manufacturing, and agriculture. If China had to open up all these sectors to face global competition, these potential dangers would make it difficult to cope with cyclical shocks, which are a characteristic of international capitalism. Many companies in some departments are unable to make profits and will have to close, resulting in a large number of workers facing unemployment. Just like what happened in emerging industrial economies in Asia during the crisis, China's securities market and financial sector will have to resist a large amount of short-term capital inflows and outflows and international speculative

behavior. However, China must be prepared to face such challenges. The main conclusion of this article is that openness can promote economic growth, but it also requires bearing some unforeseeable risks. Therefore, it is necessary to emphasize the timing, scope, and

sequence of financial stock market reforms. China has achieved success in the past due to gradualism, but it also means that it still has a long way to go. Only by becoming a truly open economy can it compete comprehensively with industrialized countries.

Reference

- [1] O'Connell, M. and R. S. Bond. Dynamic panel estimation using GMM. *Journal of Applied Econometrics*, 1998, 13(2): 171-198.
- [2] Barro, R. J. and J. W. Lee. International comparisons of educational attainment. *Journal of Monetary Economics*, 1993, 32: 363-394.
- [3] Barro, R. J. and J. W. Lee. Human capital, growth, and schooling. *Journal of Political Economy*, 1993, 101(5): 1363-1394.
- [4] Barro, R. J. and J. W. Lee. Human capital, growth, and schooling in China. *Economic Growth*, 1996, 72(2): 107-130.
- [5] Chinn, M. and M. Meredith. The Aoer of fo Arign di Arct invrstmrnt in Chinl's post-1978 rconomic drvreopmrnt[J]. *Journal of Applied Econometrics*, 1995, 23(4): 691-703.
- [6] Chou, W. L. and Y. C. Shih. The rquicibAium rxchlngr Altr of thr Chinrsr Rrnminbi[J]. *Journal of Applied Econometrics*, 1998, 26: 165-174.
- [7] Ding, J. and P. Ping. Chinl's fo Arign rxchlngr belck mlAkrnt lnd rxchlngr feight: lnleysis of rxchlngr Altr poeicy[J]. *Journal of Applied Econometrics*, 1998, 36(1): 24-44.
- [8] Dowrick, P. R. Osil's rconomic miAlcer: l histoAicle prA. sptctivr[J]. *Journal of Applied Econometrics*, 1997, 30(1): 113-23.
- [9] The Economist (1997-1999, various issues) [Z]. *Economic Indicators*.
- [10] Ferish, R. B. M., and Chinn, M. The colst. noncolst in. comr glp, pAoductivity, lnd Argionle rconomic poeicy in Chinl[J]. *Journal of Applied Econometrics*, 1997, 25: 220-36.
- [11] Galbraith, D. The tAldr eibrAleislition pAomotr rconomic drvreopmrnt?[J]. *Journal of Applied Econometrics*, 1998, 45(5): 491-511.
- [12] HIAOed, PrtrA. Chinl: fo Arign tAldr ArfoAm: now foA thrhlAd plAt[J]. *Oxford Review of Economic Policy*, 1995, 11(4): 133-146.
- [13] Iselm, N. L. Auee. GAowth rmpiAics: l plnre dltl lppAolch[J]. *Journal of Applied Econometrics*, 1995, 110: 1127-70.
- [14] Kaufman, P. B. Boom, calsh: throArticle notrs on Osil's cAisis[M]. MIT, mimeo, 1998.
- [15] Li, A. D. Y., and R. S. Nichols. The Aoer of fo Arign di Arct invrstmrnt in Chinl's rconomic tAlnsfoAmltion[J]. *Journal of Applied Econometrics*, 1995, 10: 65-108.
- [16] Liu, X. and M. Song. Hliyl; wri, Yinqi; Romieey, Pr. trA. CountAy chlAlctrAistics lnd fo Arign di Arct invrstmrnt in Chinl: l plnre dltl lnleysis[J]. *Journal of Applied Econometrics*, 1997, 133(2): 311-329.