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## **Untangling the relationship between property markets and macro economy in China**

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# Untangling the relationship between the property markets and macro economy in China

## Abstract

*Macroeconomic reforms in China have contributed to average GNP growth rate of 9.0% for the period 1986-1992. The average income growth for Chinese urban workers during the corresponding period was only 3.3% per annum. In addition, wage increases never seemed to keep pace with rapid economic growth. In large cities like Beijing, an average flat of 56 square metres costs 10-20 times the annual income of a typical household. Two decades of free-market reforms have transformed China to the point that workers have the freedom to live and work where they want. But spiralling housing prices keep turning workers away from the rudimentary property market.*

*The purpose of this paper is to map out the relationship between property market development and economic growth of China since reform and opening-up of the country from 1978. A closer examination has revealed that although there is strong correlation between property development and economic growth, other factors such as low-income levels, disputes over legal title to property, and low rentals affect the quantum of housing investment. The government has made it clear that housing development is a pillar of economic growth in the decades to come; so the impact and influence of the housing industry on the economy cannot be underestimated. Finally, based on an analysis of the current process and practice in housing development; their effects on the macroeconomic reforms of China will be summed up.*

**Key words:** Property markets, housing industry, economic growth, and macro economic reforms, China

## ***Introduction***

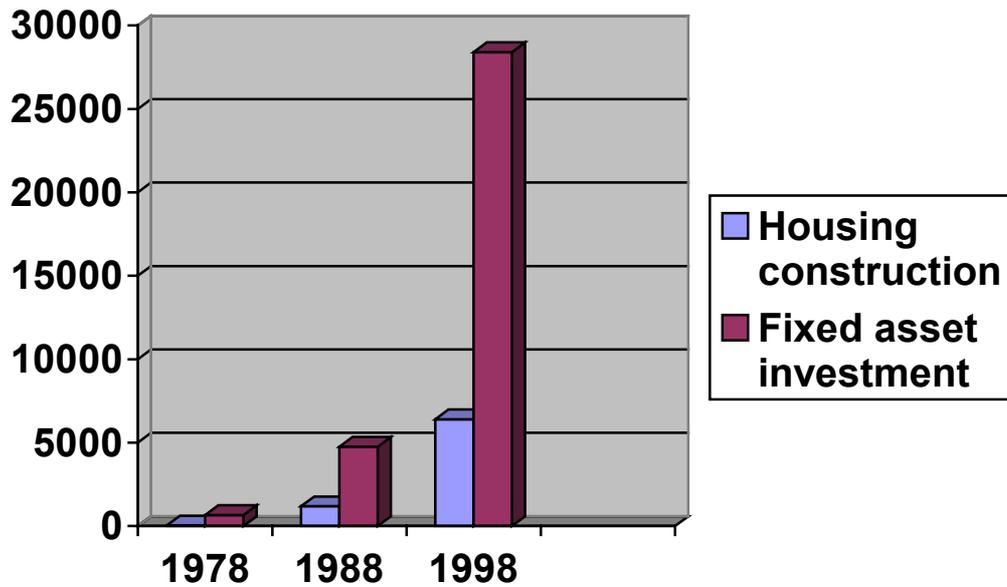
China's economy expanded 8% in 2002 and 9.9% in the first quarter of 2003. Owing to the impact of the severe acute respiratory syndrome, the Chinese economy recorded gross domestic product growth of only 6.7% in the June quarter. But the impact of SARS was temporary. The total investment in the real estate sector was 381.7 billion yuan (US\$ 46 billion) during the first half of 2003, an increase of 34 percent over the same period last year (People's Daily 26 August 2003). The real estate sector has become a core industry of the Chinese economy. Do business cycles in the changing macroeconomic environment of China affect local property cycles? Do property boom and bust lead to economic upturn and downturn in China? This paper attempts to address these questions by examining the relationship between development of the property market and economic growth in China. The first part provides some background on the Chinese property market. The second and third parts look at the relationship between property market and economic development and examine the impact and influence of the current process and practice in housing development on macroeconomic reform in China.

## **Background**

Of the 668.72 billion Yuan in social fixed asset investments in 1978, only 39.21 billion Yuan (5.9%) was spent on housing construction. This jumped to 1187.12 billion Yuan (25 %) out of 4753.80 billion Yuan in 1988. In 1998, 6393.81 billion Yuan (22.5%) were invested in housing construction out of social fixed asset investment of 28406.20 billion Yuan (Figure 1). As investment in social fixed asset for 1998 had increased almost sixfold, the 22.5% capital (6,393.81 billion yuan) injected to the housing industry was significant and even surpassed the amount of total social fixed asset investment (4,753.80 billion yuan) in 1988.

Figure 1

Housing construction in proportion to social fixed asset investment in China (in billion Yuan)

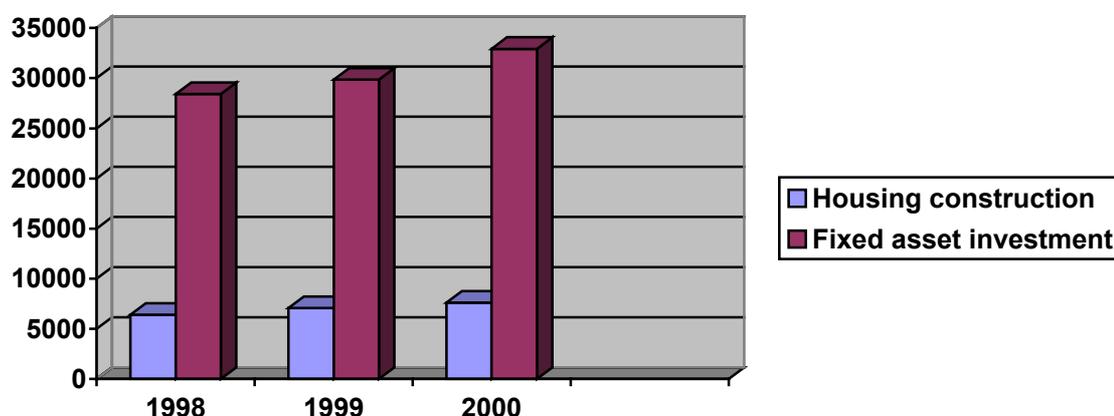


Source: China Statistical Yearbook 1999

To get an idea of the recent trend in housing investment as a share of the social fixed investment, the corresponding figures for 1999 and 2000 were 7058.78 billion Yuan (23.6%) out of 29854.70 billion Yuan and 7594.14 billion Yuan (23.1%) out of 32917.70 billion Yuan (see Figure 2).

Figure 2

Housing construction in proportion to social fixed asset investment in China (in billion Yuan), 1998-2000.



Source: China Statistical Yearbook, 2001

With the opening-up of the Chinese market since 1978, the real estate industry has been one of the drivers for rapid economic growth in China. The structural change from a centrally planned economy to a more market-oriented one has brought changes to patterns of employment and consumption. From 1998, the State and work units no longer constructed and allocated public housing. Since then, workers were not tied up in employment-related housing and could, if they found the right job, live near the place where they work.

Rents for urban housing have been raised but they did not account for much of the living expenditure, see Table 1 below.

Table 1: Urban rental as percentage of living expenses

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Year	1995	1996	1997	1998	1999	2000
Urban rental as % of living expenses	2.92	3.16	3.55	3.99	4.24	4.03

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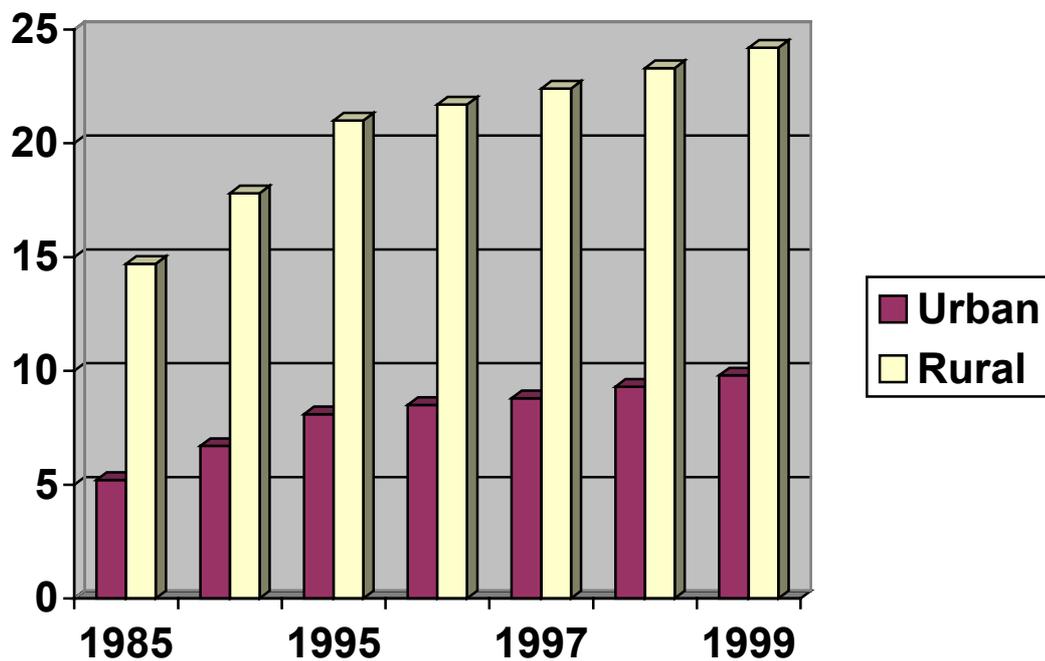
Source: China Statistical Yearbook 2002

## Perspectives on evolution of the Chinese property markets

Under planned economy, urban housing was provided by the State. Land was granted free to work units or state enterprises for housing or non-residential development. While use of the offices and industrial buildings were at the discretion of the State enterprises, residential units at very low rents were allocated to workers according to rank, years of service and size of family. The focus of this paper is on urban housing as people in the countryside enjoy higher living space per person (see Figure 3).

Figure 3

### Per capita living space in China (sq m)



Source: China Statistical Yearbook, 2000

Under welfare allocation of public housing, urban workers had user rights of the assigned property, not ownership rights. There was no real estate market, nor were there market prices or rents. Reform and opening-up of China since 1978 has led to economic and urban housing reforms, leading to the gradual evolution of marketization of housing. In other words, the scarce housing resource has become a commodity with prices and rents determined by market forces.

Apart from pricing mechanism, the property rights issue was essential to the marketization process. This involved changing material allocation of housing to allocation by housing subsidies. Prices and rentals would be determined by the market forces of supply and demand. Property agency services were introduced, and so were legislations protecting property rights. Only when titles were clear could property rights be transferred.

### **Mode of housing investment**

From a unitary omnipotent mode of housing provision by the State to multi-faceted investment approaches by the government, local and overseas developers, State owned enterprises, individual investors and other co-operative style of housing development; the mode of housing investment in China has been completely changed.

Price always assumes a dominant role in a market mechanism. The evolution to marketization of housing will be dictated by the market forces of supply and demand of the housing commodity. A housing market has come into being where the housing stock can be freely traded. Such exchange of real property involves protection of legal rights by comprehensive legislation, and facilitated by the services of real estate agencies.

### **Driver for housing marketization**

Let us look at the driving forces behind this evolution of housing marketization. One of the keys to a housing transaction is the price, so pricing as determined by the interplay of supply and demand forms the ‘chip’ to accelerate the marketization process. Traditionally, the Chinese workers just wait for allocation of housing by the State enterprises where they work, and housing investments are made by the State and State-owned Enterprises (SOE). Welfare allocation of housing, medical services and education compensate for the low salary. With not much money in the pocket, there is not much consumption behaviour. Therefore, the road to commodification of housing and formation of a property market demands a “paradigm shift” to a market economy (Li, 2003), which is more demand-driven. Instead of material allocation of welfare housing, housing subsidies are given to the workers. As salaries have been raised and rents for public housing increased, the workers will turn to the emerging property market to satisfy their housing needs.

Housing subsidies alone are not enough; other sources of housing finance are needed. To increase workers’ purchasing power, home loan mortgages, mortgage insurance

and securitization of housing finance help make housing available in the market. To achieve marketization of housing, housing subsidies should replace welfare allocation of housing. At the same time, rents should also be increased to make home ownership attractive.

To increase real demand for housing, different market segments should be created for people of different income levels. High-income earners aspire to high-end commodity housing; middle-income households prefer low-profit housing so that they can buy apartments at cost, and low-income people get housing subsidies to buy or rent low-cost housing. This has paved the way for marketisation of housing because more people will turn to the property market as their income and living standard improve.

Land resource was not effectively used in the past. The evolution of housing to a marketized context has called for a more market-oriented approach to sale of land or, more aptly, sale of land use rights. This will act as a catalyst for the housing marketisation experiment. Land for some Anju (peaceful living) housing projects takes up some 40% of the development cost. To bring it down to a more acceptable level of about 20% of the project cost, a differential scale of charges for land use rights should be adopted, with concessionary land grants for economy low-cost housing development.

The above measures have provided the means to stimulate the effective demand for housing by people of different income streams. The platform to meet such demand is the property market which capacity needs to be expanded as marketization ‘zips’ in. Although resolving the property rights issue is on top of the housing reform agenda, property transactions cannot be smoothened until a more comprehensive legal rights protection system is in place.

Past reliance on welfare provision of housing and traditional distaste against borrowing for consumption has been a spanner in the works of housing marketization in China. Ideological changes cannot be effected overnight. The change of the mode of consumption from work unit-tied welfare housing to the new concept of buying houses with housing subsidies takes time. Meanwhile, the Chinese government should beef up legislation protecting the property rights of homebuyers.

## **Mapping the relationship between development of the property markets and economic growth of China**

Property development has been made a pillar of economic growth in modern China, and business cycles brought about by the changing macroeconomic environment tend to affect the property cycles. Does a peak in business cycle always give rise to a property boom or put it the other way round, does a trough in business cycle lead inevitably to a slump in the property market of China?

In 1978, housing investment was only 1.3% of the Gross Domestic Product in China. With the introduction of housing reforms in 1988, it surged to 8.0% of the GDP. In the decade that followed, housing development accounted for 6% to 8% of the GDP and reached 8.2% in 1998, 8.6% in 1999 and 8.5% in 2000 (Table 2).

The real estate industry in China started to pick up in 1989 and had experienced moderate growth in 1990 and 1991. Under the influence of paramount leader Deng Xiaoping's tour of the south in 1992, housing investment activities increased dramatically, especially in land leased and houses built. Housing investment has contributed to 7 – 8 percent of the GDP since 1986.

Table 2: Housing investment as percentage of GDP

(Billion Yuan)			
Year	GDP	Housing investment	Percent
1986	10202.2	777.8	7.6
1987	11962.5	944.2	7.9
1988	14928.3	1187.1	8.0
1989	16909.2	1194.7	7.1
1990	18547.9	1164.5	6.3
1991	21617.8	1417.4	6.6
1992	26638.1	1716.9	6.4
1993	34634.4	2725.8	7.9
1994	46759.4	3806.4	8.1
1995	58478.1	4736.7	8.1
1996	67884.6	5198.5	7.7
1997	74462.6	5370.7	7.2
1998	78345.2	6393.8	8.2
1999	82067.5	7058.8	8.6
2000	89403.6	7594.1	8.5

Source: China Statistical Yearbook 2002

The real estate sector is a growing industry and has contributed to phenomenal growth in investment in China. According to figures released by the National Bureau of Statistics on November 18, 2002, fixed-asset investments increased 23 percent year-on-year to 308.1 billion yuan in October 2002. Investment in real estate jumped 36.6 percent to 685.6 billion yuan from January to October 2002. Sales of houses in China rose 35.4 percent to 305.9 billion yuan during the same period.

## **Relationship between property cycles and business cycles**

Like business cycles, property cycles exhibit periods of recovery, boom, recession and bust. Oluwoye and Wong (2001) have examined the two main types of property cycle theories: exogenous and endogenous. The exogenous theories of property cycles are concerned with the broader context of the particular characteristics of the wider economy and their effects on the property markets, while the endogenous theories of property cycles are concerned primarily with characteristics of the property markets per se.

In addition to endogenous or internal forces of the changing patterns of demand and supply and exogenous or external factors arising from national and international cyclicity, the third major cause as identified by Dehesh and Pugh (1997) being structural economic changes which tend to interact with endogenous and exogenous cycles in the contexts of world cities.

### **Is property cycle a slave to business cycle?**

Economic recovery seems to be faster than recovery from a property bust in China because the product life cycle of property development is long (normally 2 to 4 years) and the amount of investment substantial. Hence it takes longer time for developers to adjust to changes in demand while the economy will improve when, for instance, the SARS epidemic waned. According to Jones Lang La Salle Greater China Property Index-April 2003, the Chinese economy grew 8% in 2002 and 9.9% in the first quarter of 2003. As a result, China's housing prices rose 3.5 percent in the fourth quarter of 2002. That was attributable to steady economic growth, housing reforms, the second-hand housing market, increased investment in real estate, and higher incomes among China's urban population (see Table 3). Therefore, real estate development assumes a pivotal role in accelerating China's economic growth.

Table 3

## Per Capita Annual Disposable Income and Engle Coefficient of Urban Households

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<b>Year</b>	<b>Per Cap. Annual Disposable Income of Urban households (yuan)</b>	<b>Index (1978=100)</b>	<b>Engle Coefficient</b>
1978	343.4	100.0	57.5
1979	387.0	112.7	57.2
1980	477.6	127.0	56.9
1981	491.9	127.6	56.7
1982	526.6	133.9	58.7
1983	564.0	140.6	59.2
1984	651.2	158.1	58.0
1985	739.1	160.4	53.3
1986	899.6	182.5	52.4
1987	1002.2	186.9	53.5
1988	1181.4	182.5	51.4
1989	1375.7	182.8	54.4
1990	1510.2	198.1	54.2
1991	1700.6	212.4	53.8
1992	2026.6	232.9	52.9
1993	2577.4	255.1	50.1
1994	3496.2	276.8	49.9
1995	4283.0	290.3	49.9
1996	4838.9	301.6	48.6
1997	5160.3	311.9	46.4
1998	5425.1	329.9	44.5
1999	5854.0	360.6	41.9
2000	6280.0	383.7	39.2
2001	6859.6	416.3	37.9

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Source: China Statistical Yearbook 2002

By way of comparison, the per capita annual net income and Engle coefficient of rural households are shown in Table 4.

Table 4

Per Capita Annual Net Income and Engle Coefficient of Rural Households

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Year	Per Cap. Annual Net Income of Rural Households (yuan)	Index (1978=100)	Engle Coefficient
1978	133.6	100.0	67.7
1979	160.2	119.2	64.0
1980	191.3	139.0	61.8
1981	223.4	160.4	59.9
1982	270.1	192.3	60.7
1983	309.8	219.6	59.4
1984	355.3	249.5	59.2
1985	397.6	268.9	57.8
1986	423.8	277.6	56.4
1987	462.6	292.0	55.8
1988	544.9	310.7	54.0
1989	601.5	305.7	54.8
1990	686.3	311.2	58.8
1991	708.6	317.4	57.6
1992	784.0	336.2	57.6
1993	921.6	346.9	58.1
1994	1221.0	364.4	58.9
1995	1577.7	383.7	58.6
1996	1926.1	418.2	56.3
1997	2090.1	437.4	55.1
1998	2162.0	456.2	53.4
1999	2210.0	473.5	52.6
2000	2253.4	483.5	49.1
2001	2366.4	503.8	47.7

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Source: China Statistical Yearbook 2002

Economic growth brings increased income and generates demand for offices, houses and factories. This will drive up property prices and increase the capitalisation of the real estate assets. Thus, developers can borrow more from banks for further real estate investment to meet the increased demand from people with improved income.

Property development will trigger development of other related industries such as building materials, construction and even the finance sector, which in turn lead to

healthy economic growth. More jobs and higher income mean less unemployment and higher consumption.

However, when property prices skyrocket to a level beyond the reach of homebuyers, demand will drop and property development will slow down. Property related industries would suffer, which will have knock-on effect on the economy as a whole. With development projects in the pipeline, developers can only shelf new projects and delay projects under construction. Even demand for completed units drops, hence prices will plunge accordingly. This leads to recession and the ensuing property bust where unemployment rate will increase and inflation high. People who enter the market probably buy property as a hedge against inflation in the long term.

Analysis of GDP growth for China over the last 20 years show business cycles of 4 to 5 years, as shown in Table 5 and Figure 4.

Table 5: GDP growth for China, 1978-1997.

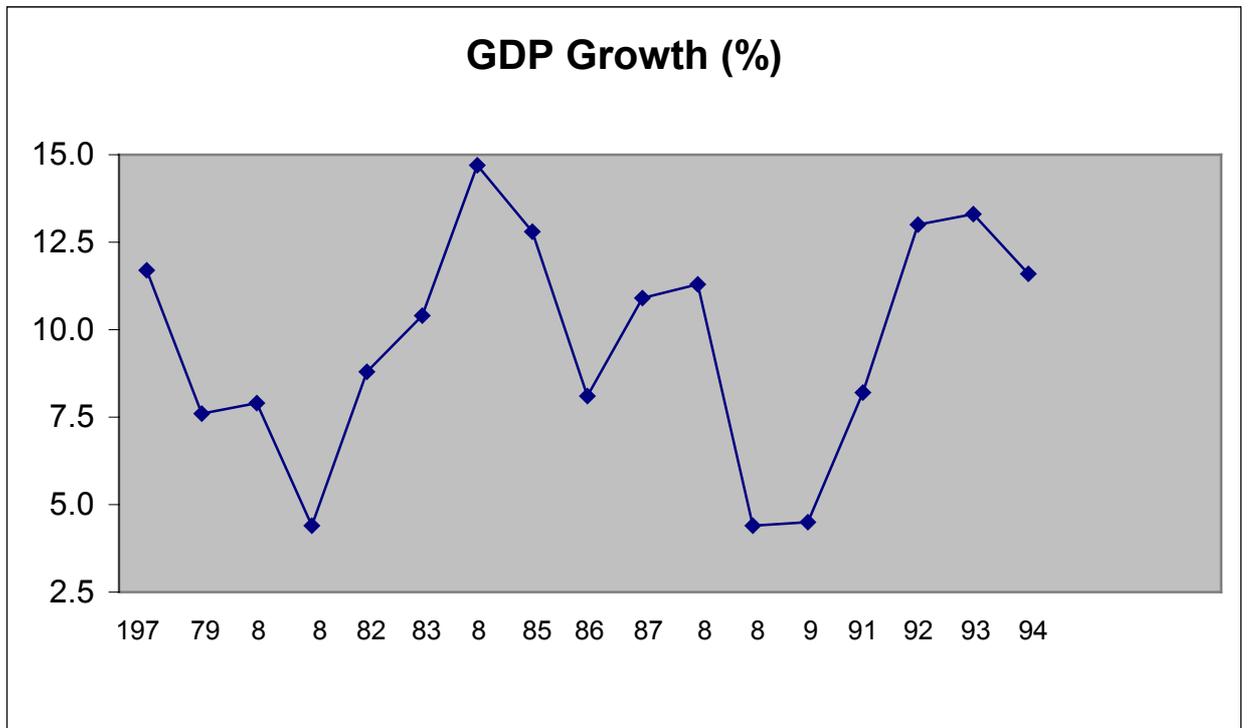
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Year	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
GDP	11.7	7.6	7.9	4.4	8.8	10.4	14.7	12.8	8.1	10.9
Year	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
GDP	11.3	4.4	4.5	8.2	13	13.3	11.6	10.5	9.6	8.5

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Source: China Statistical Yearbook 1998

Figure 4: GDP growth of China, 1978-1994.



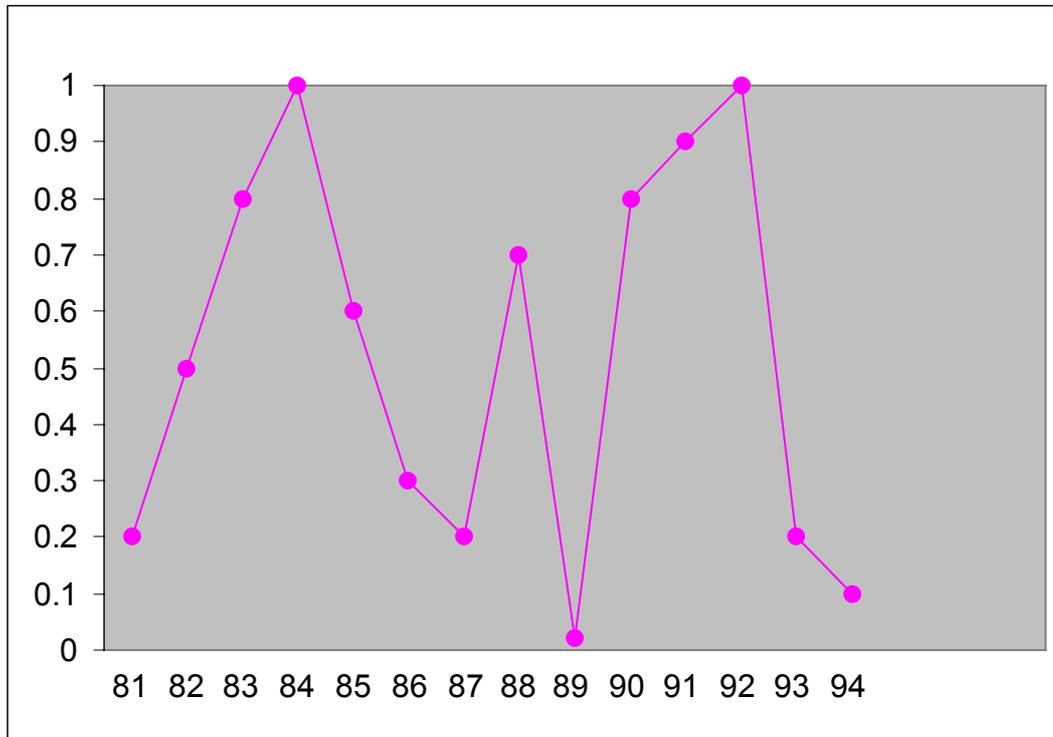
Source: China Statistical Yearbook 1998

### Property cycles

1984 was the first peak of the property market since reform and opening up of China in 1978. It experienced a short trough in 1987 before reaching another peak in 1988. The peak was short-lived and it plunged to a deep trough in 1989. There was yet another peak in 1992 before easing off in 1993, reaching another trough in 1994. Thus, a boom and bust cycle of 4 to 5 years can be observed in the Chinese property market (Figure 5).

Figure5

Property cycles of China



Source: Tso & Kao et al., 2002.

The rapid development in 1984 (after reform and opening-up of the Chinese market) and 1992 (Deng's southern tour) led to property booms in 1992 and 1993.

### Causes of property cycles

Like fathers like sons, property cycles seem to follow economic cycles. As a developing country, China counted on industrialization as a basis for economic growth. More and more people turned to manufacturing and service industries for higher incomes. Industrialization would lead to economic growth and prosperity. But the industrialization process would slow down if there were lack of capital, skilled labour, technology and food supplies. Recession would set in if such situations persisted. Therefore economic ups and downs would have direct repercussions on the real estate industry.

From a planned economy to a socialist market economy, there have been reforms in the political system, finance structure, and a more market-oriented system of housing investment and distribution. The real estate industry is no exception, as manifested in the housing system reforms.

Real estate development has contributed to economic growth in modern China, accounting for 1.5-2 % of the GDP. It has caused structural changes in employment and consumption patterns. As more people aspire to the security of homeownership and consumption patterns, housing has become China's core industry. There is latent demand for urban housing in the huge Chinese market (Zax, 1997). It has beneficial effects on the well being of related building and finance industries. Development of sustainable energy-efficient housing calls for use of more cutting-edge technology like nanotechnology in house building. Existing local industries such as construction material and interior design industries will benefit, too. If the government leaves the market forces of supply and demand work by themselves, there will be plenty of room for expansion of the property market as urban population grows.

However, speculation of property in Shanghai, Beijing, Shenzhen and so on may drive up property prices to an unaffordable level, resulting in vacant domestic buildings. According to the National Bureau of Statistics, the number of unlet and unsold properties grew by 9.6 per cent between January and April, compared with the same period last year. The increase was much higher than the 6.4 per cent growth rate during the same period last year (China Daily June 12, 2003).

Since 1978, China has been undergoing changes in economic structure from a planned economy to a socialist market economy. This has brought a series of reforms like decentralization of power, reform of the finance structures and the wages system. The same is true for housing reform, which entails the change from welfare allocation of housing to commodification of housing. In other words, housing has become a commodity.

With average GNP growth rate of 8.8% during 1981-1991, the GNP of China has grown to 13.4% in 1993. Urbanization quickens as urban population has increased from 26.41% in 1990 to 26.37% in 1991 and 27.63% in 1992. This has led to greater demand for housing, which was fuelled by rapid economic growth in the early 1990s.

As a result of these reforms and opening-up of the market, China has recorded unprecedented growth in fixed assets investment. With strong pent-up demand for living accommodation, the growth in housing investment was even more remarkable, as shown below.

Table 6: Growth in housing investment in China (Y/Y% change)

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Year	1980	1981	1982	1983	1984	1985	1986	1987	1988
Percentage	62.6	13.9	29.3	0.2	4.2	48.5	0.1	6.8	19.3
Year	1989	1990	1991	1992	1993	1994	1995	1996	1998
Percentage	-21.8	13.8	58.5	43.4	117	24.7	10.2	13.7	5

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Source: China Statistical Yearbook 1999

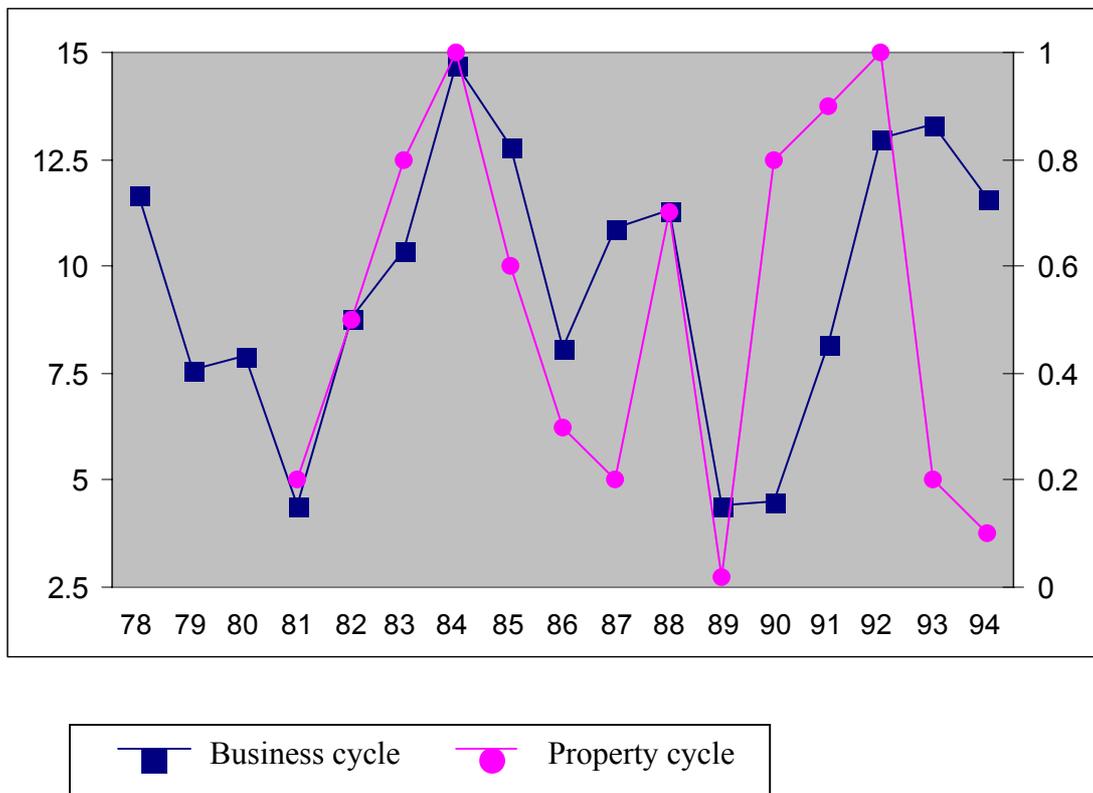
The gradual transformation of China from a planned economy to a socialist market economy has resulted in more decentralized local government and enterprises. The increase in real estate investment has become the prime mover for building and construction-related industries. Increased income and large-scale development by overseas developers had led to higher real estate prices, as in 1992-1993.

### **Impact and Influence of the housing industry on economy**

Figure 6 presents the property cycles versus economic performance of China measured by GDP figures from 1978 to 1994. The years 1984, 1988 and 1993 recorded striking economic performance (GDP growth of 14.7%, 11.3% and 13.3% respectively) as a result of opening-up of the Chinese economy and macroeconomic reforms after Deng's visit to the south in 1992. With year-on-year growth of housing investment of 62.6% in 1980, 13.9% in 1981 and 29.3% in 1982, China experienced the first property boom in 1984. Housing reforms, housing subsidies and increased disposable income especially for urban households led to property boom years of 1988 and 1992, when per capita annual income jumped from 343 yuan in 1978 to 1,181 yuan in 1988 and 2,026 yuan in 1992. Compared with previous years, housing investments increased 19.3% in 1988 and 43.4% in 1992. The housing booms contributed to healthy growth of the construction industries and provided job opportunities for building-related industries, hence better economic performance in 1984, 1988 and 1993.

During the recessionary years of 1986 (GDP of 8.1%) and after the democratic movement in Beijing in 1989 (GDP of 4.4%), the Chinese property busts occurred in 1987 and 1989. There were contractions in housing investment in 1986 (0.1 % or almost no growth) and even -21.8% in 1989. As it will take about 2-4 years for housing development from blueprint stage to completion stage, developers cannot adjust to abrupt changes in demand. Therefore, the pace of economic recovery is faster than recovery in the property market.

Figure 6: Property cycles versus economic cycles in China, 1978-1994.



Deng Xiaoping's tour of South China in 1992 triggered investments in the real estate industry, which has become one of the main drivers of the economy. The real estate industry has in recent years become one of China's core industries, contributing 1.5 to 2 percentage points to the overall growth rate of gross domestic product (China Daily June 12, 2003).

The world's sixth-largest economy achieved 8 per cent GDP growth last year. The GDP dropped to 6.7 per cent in the second quarter, a contraction of 3.3 percent from 9.9 per cent in the first quarter of this year. The SARS epidemic, though temporary and regional, did impact on the Chinese economy. JP Morgan is forecasting China's GDP growth of 7.6 per cent for 2003. The outbreak of severe acute respiratory syndrome, which killed 343 people in mainland China, remained a threat as the World Health Organization has warned that the disease could be seasonal and return this northern autumn (Australian Financial Review 18 July 2003, p.22).

## Effect of the current process and practice on macroeconomic reform

The amount of direct investment in real estate affects the property cycles, so do economic policies of the government and other exogenous factors. It is interesting to note that the macro-economic policies of the central government do exert influence on property cycles, which are summarized in Table 7.

Table 7: Impact of real estate policies on the Chinese economy

<b>Year</b>	<b>Development objectives</b>	<b>Government directives</b>	<b>Policy measures</b>	<b>Economic impact</b>
1979-1984	Amend ten-year planning brief	Adjust with a view to improvement	Adjustment of property portfolio & decentralization of power	Economic recovery
1984	Real estate development	Housing reform	Introduction of commodification, establishment of development companies & sale of public housing at subsidized prices	Economic growth
1985-1987	Putting the brakes on proliferation of commodity housing	Initial reform & opening-up	Better management of commodity housing & restrictions on sale of public housing at subsidized prices	Economic recession, depression
1988	Further real estate development	Reform & opening-up	Acting on the success of Shenzhen land sale, amendment of the constitution to allow land leases & expansion of market mechanism	Economic growth
1989-1991	Containing	Deepening of	Control on	Recession

	real estate development	reform, but checking growth	construction projects, reform of enterprise structural and reduced scale of infrastructure due to tight budget	
1992-1993	Speeding-up real estate development	Encouragement of construction activities under reform and opening-up	Foreign direct investments & market prices for real estate; decentralization of power & loan for development purposes	Economic growth
1993-1995	Growth in real estate development	Sustained, steady & healthy growth	Tightening the grip on management of real estate market, together with legislations on capital gains tax & real estate management; further control on finance industry	Depression
1996-1999	Systematic growth of real estate industry	Real estate industry as a growth pole of economy and consumption of real estate	More mortgage loan facilities, Housing Provident Fund & a secondary housing market	Recovery
2000-2002	Goal of good quality affordable housing, and readjustment of the real estate market.	Housing sector to become one of the pillar industries of the national economy. The real estate sector has become one of the driving forces of the Chinese economy.	To invest 157.8 billion yuan in affordable housing, and to build 8.4 billion square metres of housing over the next 10 years to meet market demand.	Growth because gross domestic product per capita stood at 5,598 yuan (US\$676) in year 2000. The figure is expected to double by 2010.

Source: adapted Tso & Kao et al., 2002.

## **Causes of policy changes**

The real estate industry emerged in 1980 and has been evolving from a per capita urban living space of 3.6 m<sup>2</sup> in 1978 to 22.8m<sup>2</sup> in 2002. Finding a solution to the long-standing Chinese housing problem has been a hot topic for decision makers, researchers and people in the building and construction industries. Although China lagged behind in the pace of industrialization, the average GDP growth has been an impressive 8% in recent years. Income for the average worker has increased, but could not catch up with the rise in house prices. As a result, an apartment of 56m<sup>2</sup> cost an average family over 10 times annual household income.

Regional disparities led to uneven development with coastal cities such as Shanghai, Beijing and Shenzhen thriving along China's gold coast and sluggish development in inland regions. The National Bureau of Statistics reported in November 18, 2002 that investments in China's western region rose 25.6 percent to 394.6 billion while those in the central region were up 24 percent to 511.5 billion yuan, and those in the eastern region grew 22.8 percent to 1.31 trillion yuan. Commercial (commodity) housing development tended to take precedence over medium to low-cost housing. This led to the austerity program of 1993 and the downturn in the real estate industry. Moreover, the Chinese authorities should beef up the real estate laws to protect the property rights of people.

## **Conclusion**

China has been undergoing rapid changes since the economic reforms launched by Deng Xiaoping in 1978. From a command economy to a market-based economy, there had been rapid transition from an agricultural society to an industrialized urban society. Real GDP grew by an average of 9 percent a year from 1978-1996, contributing to significant increase in per capita income. The amount of bank savings for people in both urban and rural areas had increased from 21 billion yuan in 1978 to 5,340 billion yuan in 1998 and 7,376 billion yuan in 2001 (China Statistical Yearbook, 2002).

This paper has tracked the relationship between development of the property markets and macro economy of China. The property cycles from 1978 to 1994 was found to be basically in tandem with the economic cycles of that period. The economy experienced peaks in 1984, 1988 and 1993, which coincided with or preceded by the property boom years of 1984, 1988 and 1992. When the economy reached its trough in 1986 and 1989, the property bust came in 1987 and 1989. Therefore, the economic performance of China from 1978-1994 had direct impact on the performance of the property market. Another major finding was the 4 to 5-year boom and bust cycle of the Chinese property market. Future studies could be made to find out whether the property cycle will exhibit similar 4 to 5-year boom and bust and whether it will echo the economic upturn and downturn of the macro economy of China.

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