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ECONOMIC TRANSITION AND COMMERCIAL PROPERTY CYCLES IN CHINA

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Key words:

Commercial property, cycles, economic transition, China, emerging markets

Abstract:

Drawn from a recently completed study, this paper aims at a better understanding of commercial property cycles in the transitional economy of China. It examines the behaviour of the property submarket system in China and considers structural changes in the socio-economic system as a primary factor in addressing the research problem. The study suggests that the underlying social and economic structure has greatly determined market behaviour. It finds that radical changes can alter the formal structure (the designed structure) of the market system, including the property market structure, but cannot alter the informal structure (i.e. the emergent structure) at the similar rate. As the study shows, cycles in the commercial property market in the economic transition is largely a key resulting feature of the continuous structural change both at formal and informal levels in a way that is often imbalanced and not always consistently changing together. The same situation also applies to the transformation of inner-city built form, which is featured by a delayed change of physical building stock against the space demand trend that is underpinned by the socio-economic transition. Put simply, there is a supply lag, mainly in the form of changing land use and building stock replacement, against economic change (the business cycle). This affects the level of effective demand for office space and hence becomes a major force in shaping current office cycles.

Introduction

The rapid growth of property investment into the Chinese property markets and the lack of understanding of market fundamentals in these property markets have become a major huddle of effective investment in this potentially vast property market. The structural change and the uncertainty in the emergent process with the formation of the new property rights system has made apparent that the workings of office markets in China are not very well understood. Without such knowledge, it is difficult to have a solid grasp of cyclical behaviour and its mechanism in emerging property markets.

And this will remain an obstruction to investors and occupiers. An effective research approach needs to combine property cycle theory with the reality in emerging markets by taking into account their underlying mechanisms.

This paper examines cyclical behaviour and its underlying mechanism in two Chinese commercial property markets in the context of the state-led transition. It aims at an improved understanding of emerging commercial property cycles in China. The paper firstly reviews the theoretical problem of directly applying property cycle theory to emerging market or transitional economy. It then suggests an integration of structural change into general equilibrium framework in mainstream economic theory. In China, this means examining the role of the economic transition in altering office submarkets and hence changes the aggregate market behaviour. The paper then examines Hainan and Guangzhou property markets as two case studies to address the research question. Finally, some conclusions regarding the relationship between the economic transition and commercial property markets in China are discussed.

Literature review

Property cycle theory is largely built on the idea of general equilibrium assuming a relatively stable (sometimes static) market structure. Numerous studies have been conducted on the behaviour and mechanisms of property cycles and many of them are focused on commercial property markets in various cities (Mueller and Pevnev, 1997, Wheaton, 1987, Barras, 1994, Barras, 2005, Wheaton, 1999, Mueller, 1995, Scott and Judge, 2000). There are also several comprehensive reviews of the body of knowledge regrading property cycles e.g. Pyhrr et al., (1999), Pyhrr and Born (2006), Ball et al., (1998) and Key et al., (1994). One of the main features of these studies is that, with a few exceptions e.g. Keogh and D'Arcy (1999), Pugh and Dehesh (2001), Seabrook et al., (2004) and Lind (2005), they are all largely based on the neo-classical economic theory, where structural change does not play a significant role.

Property cycle theory applies reasonably well in describing and explaining mature property markets. It faces difficulty, however, in explaining cyclical behaviour in emerging market systems. The recent progress of the New Institutional Economics (NIE) has emphases the close link between structural change and economic performance/stability (North, 1990, Coase, 1960) and it has been suggested that state plays an important role in this process (Stiglitz, 1989). Most emerging market systems, such as China, have experienced substantial structural changes that can affect almost every component of the economic system (Jing, 2003). And the economic transition has been the main driving force of the Chinese economic prosperity in the past two decades. In mature property markets, recent studies have intended to incorporate state-led structural change into existing models of property markets (Adams et al., 2005, Evans, 2004). Given the role the economic transition plays, Chinese commercial property cycles are unlikely to be well understood without more specific and explicit analysis of the interaction and relationship between structural change and property market performance. This paper aims to address the

following research question: To what extent has the structural changes, heavily driven by the state-led economic transition, affected the performance and stability of the emerging commercial office market as reflected by market-led cyclical behaviour?

Methodology and justifications

The ideal of general equilibrium remains the basis of the analysis, for example, the property submarket system suggested in Keogh (1994) and Ball et al. (1998) show the mechanism in typical property market systems. As the market mechanism starts to play a central role in the economic system in China, the same model is becoming an effective means to study this emerging market. Importantly, this study also integrates the structural change into the sub-market model and treats it as a key factor that has a simultaneous impact on each of the sub-markets. The issue of structural change and its role in influencing equilibriums in the emerging commercial property market system is identified and examined, using data mainly collected from semi-structured interviews conducted with more than 40 practitioners and academics. Given the role of structural change in Chinese property markets, interview and historical data are used to identify and examine interplays at sub-market level that can explain observed property cycles. Specifically, the analysis focuses on the effective demand in office user markets, the immaturity of the asset market, building lags in the development sector, and land supply issues in affecting property prices.

This study chooses two property markets, namely Guangzhou and Hainan, as cases to examine the common features of Chinese commercial markets. The conditions of the two markets are quite different, but they both reflect unique features of the Chinese property market system. The 1990s Hainan property cycle is examined specifically for its substantial and radical structural change as part of the economic transition model. Hainan's experience helps to understand the links between the structural change and property market stability at the early stage of the economic transition. It is not for the analysis of issues such as the regularity of cycles. The Guangzhou market is examined for more detailed interactions at the sub-market level that drives office cycles. A combined result of the analysis shows the key role of the economic transition in creating cycles in the emerging commercial property market. As the transition is largely state-led, the analysis mainly concerns the way state makes policy and its enforcement, in regard to its reaction to market changes. That affects property market stability. Therefore the analysis of office submarkets gives special emphasis on the examination of the state's role in changing market behaviour.

Radical structural change and property cycle in Hainan

Considering the size and the real space demand, the Hainan property market is small in scale and simple in structure. However, Hainan is China's newest province and the largest designated Special Economic Zone (SEZ), both established in the late 1980s. A pilot study of the Hainan property market shows there is an emerging and relatively simple economic base in Hainan which receives strong state policy impact and more radical market formation. Except the tourist sector, Hainan does not have a strong

service industry which implies a low potential demand for commercial space. This is at the core of the 1990s commercial property crisis. The emergence of the Hainan commercial property market started in the early 1990s and the structural change was rapid and radical which was mainly state-led. This is summarised in table 1 and has been discussed in more details in (Wu et al., 2006).

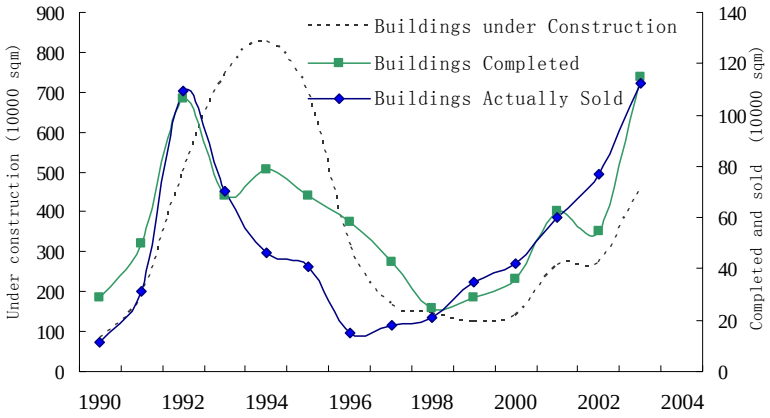
Table 1 Policy changes and the Hainan property market

	Time period	policy focus
I	Late 1980s to early 1990s	Formation of the urban land tenure system
II	Early 1990s	Property-led economic growth
III	Since the mid 1990s	Policy control of the property and financial systems
IV	Since the late 1990s	Handling incomplete, vacant and idle projects

Source: author

Regarding the 1990s property cycle in Hainan, space demand and supply had moved quite consistently at the early stage of the property boom i.e. 1990–1993 (see figure 1). However, given the economic boom in Hainan largely led by property investment, the absorption of newly completed space contained a large share of speculative buyers who did not have real occupancy needs; in other words, they raise vacancy level in the user market. Compared to the building commencement data over the same period, the completion and absorption volumes at the peak of the boom (i.e. 1993) were almost negligible. What figure 1 implies is that a large proportion of commenced works were either withdrawn or abandoned at certain stages which represented real losses.

Figure 1 Absorption (face) vs. supply in relation to space under construction



Source: HNBS, see Wu et al. (2006)

The economic transition, especially the land reform, the SOEs reform and changes of foreign trade policies, has enabled investment funds to flow from various entities and financial institutions (i.e. state-owned banks) into the property sector in Hainan (Xie et al., 2002). It is now clear that there were major inconsistencies between the finance system and other parts of the economy during the transition. The amount of bank loan by state-owned commercial banks comprised 77.6% of total loans by 1997 in China's banking system (Yang, 2000), which remains above 72% by late 2005 - see Table 2.

The initial reform encouraged free expansion of capitals in the Hainan property sector from different sectors from various parts of the country or foreign countries. When the state felt the property boom was unsustainable and threatening the economic stability, the macro-economic policy was put in place. The market was cooled down within a short period because the predominant role the state played in the finance system. The behaviour is vividly described by Liu (2003, p50) as "it soon gets chaotic if the (state) control is released, and it dies instantly if the (state) control is reinstalled…"

Table 2 Chinese finance system conditions by late 2005

2005 3rd quarter	Total	State-owned banks	Joint stock banks	Urban commercial banks	others
Trillion ￥	35.96	19.15	5.49	1.88	9.44
% of total finance system	-	53.3%	15.3%	5.2%	26.3%
% in the banking system	-	72.2%	20.7%	7.1%	-

Source: (CBRC, 2005)

Besides major developers with SOEs background, a large number of 'innocent' private developers also appeared in Hainan. The emerging private developers had the flexibility and creativity but usually lacked experience and finance base. As a result, most of them did not have long term goals and they often took the advantage of their ability to access land or capitals (e.g. bank loans) due to their 'insider information' or specific power. This led to an unstable property development sector and the potential for severe property cycles. Considering the short history of market emergence is less than 20 years in a relatively small scale economy, the first property cycle in Hainan was accompanied by excitement, uncertainty and struggle of the role-change process of the property development industry.

Similar to the Guangzhou land market, the transition has distorted the land pricing system in Hainan where land can be obtained through the state allocation channels for lower costs and re-distributed via the market for higher prices. Interview with a legal practitioner showed that the 1990s property boom was mainly driven by a speculative land boom which involved frequent land transfers without substantial improvements. As the newest Special Economic Zone in China, the planning system especially the land use control system is much less developed than that in Guangzhou. Again, state policy control became the main reason for stopping the land boom.

The Guangzhou office market

Guangzhou is one of the major commercial centres in China. It is generally agreed that the Guangzhou office market started to emerge in the late 1980s, where the creation of transferable property rights at the constitutional level was the official catalyst of this emerging process. From the structural change, the performances of the aggregate building sector and the general economy have roughly experienced three distinctive stages. In the 3rd stage, since the mid-1990s the level of GDP growth and building activity in Guangzhou has been relatively stable with sustained growth rates.

It implies a sustained level of underlying office demand. Table 3 presents a summary of the basic analytical results described above.

Table 3 Three stages of GDP growth and building activity variations in Guangzhou

Stage	Period	Mean	SD	Min	Max
one	GDP 1951-79	10%	13%	-22%	40%
	Construction 1951-79	20%	39%	-56%	132%
two	GDP 1980-94	23%	11%	10%	45%
	Construction 1980-94	34%	25%	-10%	74%
three	GDP 1995-04	14%	2%	12%	18%
	Construction 1995-04	9%	4%	2%	17%

Source: Guangzhou Statistic Bureau (GZBS, 2005)

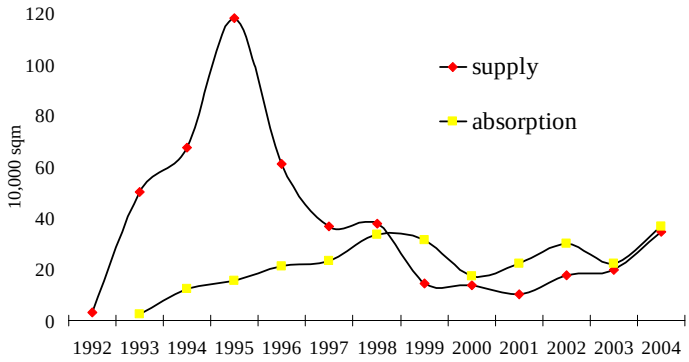
Prior to the economic reform, office stock was held mostly by state-owned enterprises and was not subject to leases/sales due to public ownership status. The office market in Guangzhou started since the mid 1980s as a tidy, primarily hotel-based rental market, mainly to serve foreign and domestic firms who intended to establish local business outlets. These characteristics were described and emphasised by experienced developers and researchers in the interview process (see appendix, interviews #10, #11, #15, #25). The early form of 'office' market is mainly due to changing business behaviour as a consequence of the economic transition and the supply lag for office. Thus a combination of commercial and semi-commercial offices forms the current stock in Guangzhou, and compared to typical classification in mature markets, office stock in Guangzhou may be classified into three general categories: 1) commercial A, B and C grade office; 2) residential office stock, and 3) state-owned-enterprise office stock. More than a decade has elapsed, some A grade buildings without substantial capital works are now being downgraded.

Structural changes and office cycles in Guangzhou

Effective demand and office cycles

According to the GZBS (2003) the number of office-based employees in Guangzhou has increased by 124.8% over a 10-year period (1992–2002). The strong potential demand in the Guangzhou office market is inconsistent with the observed effective demand over the same period (see Figure 2). Therefore it is important to analyse the behaviour of office user groups, such as high-end, small business and medium ones, in relation to existing stock, new supply and alternative or potential space for office use. Also, demand changes in different grade office markets seem not closely link with each others due to distinctive user preferences between small business firms and large ones where corporate image is the main concern. Mainstream property cycle theory suggests that effective demand is directly associated with rental levels, which then affects investment returns in office investment market as well as supply of new space and the release of land. In emerging markets, this theory should be treated with caution due to the immature price system.

Figure 2 Office user demand and supply in Guangzhou



Source: Guangzhou Land and Property Management Department (GZLMD, 2005)

The uneven process of economic and physical structural changes under the transition can affect effective office demand, which however remains a poorly understood area. Effective absorption and new office supply ought to change at a rate that is below the aggregate increase of new supply minus the depreciation rate of existing stock. The analysis of effective demand and supply requires an understanding of existing city fabric such as building stock, locality as well as the wealth base of the city. Based on interviews with stakeholders, some identified user behaviours are listed in table 4. The lack of business expansion in Guangzhou makes high-end office users reluctant to increase their rented spaces; this is also associated with local business culture and industry type. The flat effective demand in Guangzhou since the mid-1990s resulted in a space market with highly rational office users. This creates a relatively stable market, but the gap between potential and effective demands also affects the level of new supply and the speed of absorbing previously oversupplied stock. This affects office development, investment as well as primary land release and existing city land use patterns.

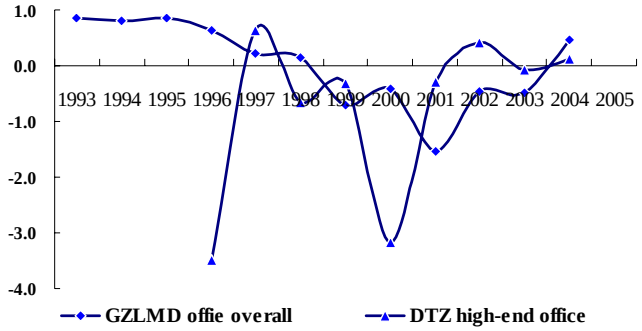
Table 4 Main behavioural characteristics of office user

* User behaviour appears to be relatively rational
* Many firms are still at the early stage of business expansion
* Most office users are sensitive to space efficiency
* Expansion of the high-end market was delayed by the Financial Crisis and is related to their growth priority in China, e.g., Beijing and Shanghai
* Macroeconomic and planning policies create uncertainties that restrict effective office demand

Source: author

Given annual supply (¢i) and effective demand (µi), as well as the assumption of one year for presale and normal sales, the balance of real demand and supply is expressed by: ài = ((¢i-(µi+1 + µi) x 0.5)/¢i. The results of demand-supply interplays using the GLPMD and DTZ data show that the A grade market and the overall effective supply-demand are negatively correlated (see figure 3).

Figure 3 User demand and supply interplays



Source: (GZLMD, 2005, DTZ, 2005)

Thus for the general office market, the structural over-supply in the early 1990s and the relatively stable and low effective demand has affected new supply substantially since the late 1990s and is triggering a new supply upswing. The 1990s office cycle and the current upswing highlight not only market cyclicality but also the transition of market fundamentals: the recent upswing is backed by the consistent market demand. For high-end offices, the initial speculation driven office over-supply was ended by the joint efforts of government macro-policy control and the Asian Financial Crisis, which Paul Krugman (1999) called "the Great Recession". The lack of new supply of A grade offices and the growth of foreign and domestic firms have kept the vacancy level close to the 'natural rate' of around 10% (DTZ, 2005). Most local consultants, developers and researchers being interviewed confirmed that a major supply peak is forecast to occur shortly (i.e. in 2007 to 2008). Overall there is consistent office user demand-supply interplays in Guangzhou, where A grade office market had behaved more balanced than the general market in the past 5 years; however, it is more volatile before 2000 which reminds the fact that the high-end office market in Guangzhou was largely driven by international users.

Based on estimated figures from interviews, government source and leasing data, table 5 compares the estimated monthly costs for lower grade offices and inner-city apartments used as office in the Tian-he district (the current CBD of Guangzhou). The result indicates, from the cost perspective, the existence and popularity of inner-city apartment being used as office in Guangzhou has its economical reason.

Table 5 A comparison of monthly occupancy costs in CBD

Building type		CBD office	CBD apartment office	
Grade		B, C grade ofice	middle to high-end apartment	
Rental	￥/sm/mth	80	60	100
Opex	￥/sm/mth	10	2	3.5
shared area		30%	10%	10%
Effective area	sqm	100	100	100
taxations		compulsury	hard to administer	
total monthly cost	￥	11,700	6,820	11,385

Source: GZLMD (2005), interviews, and property agency online data

Assuming 50,000 median/small firms operate in Guangzhou where 40% occupy inner-city apartments (an average rented area of 100 m^2), the total underlying demand for office will be 2,000,000 m^2. If converted to effective, this can almost take up the entire office oversupply that was accumulated in the 1990s. Although not popular in mature markets, the use of inner-city apartments for office purpose is common in Guangzhou and has had a substantial impact on office rents and supply, which has led to greater government attention to policy and administration. Two factors stressed by interviewees (appendix, interviews #8, #10, #15) in explaining this behaviour are: lower management fees for inner-city apartments and much higher level of net usable area in these buildings compared to office buildings.

The use of inner-city apartments for office purpose is a natural process of competing land use. With more economical occupancy options available, the wealth base of the city and its business community and the office user behaviour determine rental market behaviour. Rental expenses are a major part of business expenditure and, for the majority of small local firms that are in the early stage of business expansion, the affordable option of the use of apartments for office purpose explains the persistent flat effective demand for standard office. Conflicts and disputes about urban changes are closely associated with socio-economic conditions and it appears the low level of social wealth is at the centre of the issue.

Transition, the development industry and supply lag

The structural change that causes building lag and the availability of higher return risk-adjusted alternatives such as residential projects have reduced the severity of the 1990s cycle and the effective supply since the late 1990s. In addition to the typical factors causing time-delays highlighted in standard property cycle theory, the rapid economic and physical structural changes contribute substantially to supply lags. For example, building lags can be associated with state policy, market conditions and the nature of the development industry. Supply lags in emerging office markets can either reduce the harshness of cycles or impose a 'pent-up' effect, which, if not handled properly, is likely to create the risk that if state interventions get weaker in domestic and international markets, the accumulated imbalance is likely to trigger major cycles.

The emergence of the market-led development industry lagged behind actual market demands. The structural change has triggered the emergence of three distinctive office suppliers, namely state-owned developers, domestic privately-owned developers, and foreign developers. State-owned developers have dominated the Chinese property market since the early reform era with the advantages such as holding well-located inner city land, 'insider information' about state policies and protections. However, SOEs developers are also disadvantaged for being inflexible in project delivery and finance decision-makings. Until recently, the direct link between SOEs developers and macro-policies has delayed their response to office demand.

Domestic private developers rapidly emerge with high flexibility, entrepreneurship and creativity. However, their lack of experience and capital at the early stage of the transition determined their role as short-term risk-takers who therefore lack the ability to confront development risks. Their access to land supply was much less effectively monitored which became the main source of the divergence of state-owned assets into private hands at little cost. The lack of obligation on state-owned assets made private developers turn to private returns to an extreme level, which placed them at the centre of the 1990s boom. This is supported by recorded court case statistics maintained by the Guangzhou Intermediate Court (interviews #7, #2). Domestic private developers usually turn to residential projects due to their high risk-adjusted returns and the better finance conditions through house presale. They lack practical experience and incentive to actively involve in office projects, thus causing supply lag. Domestic developers restarted actively involving in major office projects in recent years by major developers such as R&F Properties who is one of the companies recently listed in the Hong Kong Stock Exchanges. Private developers also started to involve in the lower-end market as the state determines to ban inner city residential offices. The transition delayed or interrupted the continuous involvement of domestic private developers in the office development market.

International developers are constrained by available land and international property cycles, although with more diverse finance and flexibility. The changing legal and political framework has restricted their rights to develop, to hold or to sell property as investment assets due to frequent policy changes, information transparency problem and high transaction costs. As a result, there is a delay for their involvement in office supply, especially in the A grade office market that links to international investment climate and policies. Foreign developers especially Hong Kong developers were the main driving force of the 1990s cycle when the A grade office supply dominated.

State-led finance system and emerging investment cycles

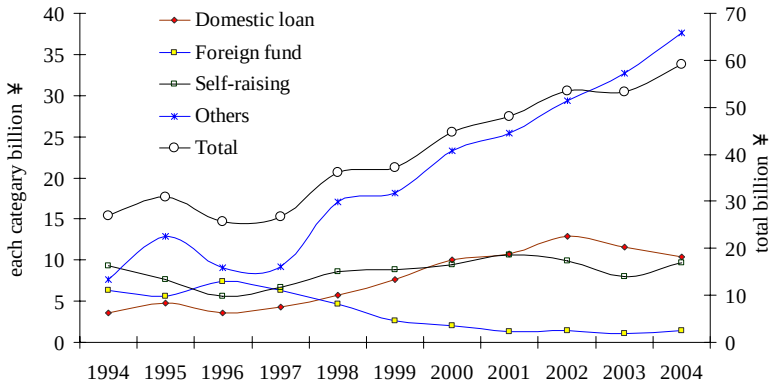
Planned economy has relatively few private investment activities and the concept of property investment is quite different from that underpins typical financial markets; so are the functions of financial institutions. Under the economic transition, investment markets are highly uncertain hence risky. The cyclical behaviour of office investment markets may be treated as the interplay of public-private investment and the state's intention in controlling capital flows, interest rates, and investment vehicles in the economic transition. Of particular concern is the return-driven office investment market as 'battle field' of the structural conflict that shapes the balance of investment demand vs. capital supply. Unlike SOEs investors, foreign investors who are linked to international markets, and local private investors who are not part of the SOEs system, are less directly controlled by the state.

The property investment behaviours in Guangzhou are shown in figure 4 based on 'source of fund'. Economic growth and the realization of house pent-up demand, with the heavy savings rate, have fuelled the property investment market. However, it is

clear that each funding source has behaved quite differently since the end of the 1990s cycle. Compared to total investment, domestic loan and self-raising fund have been stable in recent years which are consistent with state policy control in bank lending. Foreign investment did not recover until 2003 which shows different paces between the Chinese and international investment cycles. Funding from the 'others' is the most consistent with total investment. As Niu et al. (2004, p9-10) showed, 80% of the 'others' represents presales funds that are held in the SOEs bank system. Clearly, the bank system bears most investment and finance risks.

The strong state control has reduced the risk of severe money crisis or boom-bust cycles, like the Asian Financial Crisis did to other markets. Most interviewees who are working in the local finance sector suggested that bank lending to commercial property projects has been restricted by central bank polity (e.g. interviews #12, #13).With the absence of alternative finance vehicles, as long as the bank system remains a secure and fair channel links the bulk of societal savings and the development and investment markets, the incentive for presale financing remains (refer to the 'others' in figure 4).

Figure 4 Source of funds for property development in Guangzhou



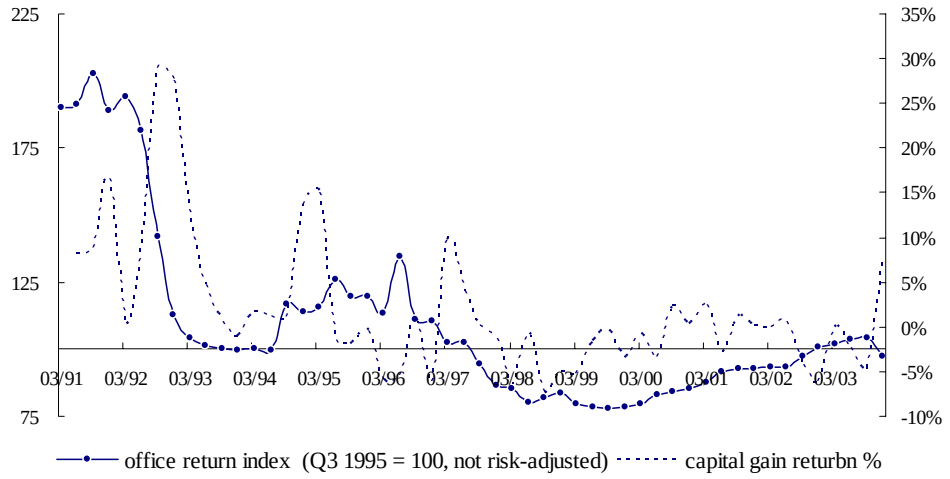
Source: Guangzhou Bureau of Statistics, (1995-2004)

State controls, together with the reduced foreign investment from 1996-2001, have continuously pushed the market to find its own way to support space demand. Because there is not a mature structure for long-term investments, the office investment market did not experience a major boost in general. If alternative property investment vehicles successfully emerge, the basis of property finance and office cycles will be altered, which then have the effect of reducing potential boom-bust cycles in the property investment market. However, it should be noted that the result may be driven by the dominance of the residential market in the investment market. The condition in the office investment market is less clear in the absence of detailed time-series data. In a world where the banking system counts for almost 80% of the 36 trillion financial assets and more than 70% of bank assets are state-owned, a state policy-led property investment market is expected (CBRC, 2005). As the SOEs sector becomes less active as office investor since the late 1990s, it is the interplay of the

private sector and the policy control of capital flow that drives office investment cycles in Guangzhou.

Figure 5 highlights the low levels of historical returns in the Guangzhou A grade office market since the mid-1990s. Newell et al. (2005) suggested a similar condition after adjusting for volatility (risk). The state policy control on the banking system ensured that finance and investment is left to foreign or domestic private investors, where the low return and the instability of international investment climate in the late 1990s has directly led to a flat office market (figure 5). The absence of domestic investment in the lower-end office sector and the focus of foreign funds in the A grade office market both contributed to the lack of office supply in the late 1990s. The strongly controlled financial and capital markets in China have enjoyed reduced volatility and a stable market in Guangzhou, however at the expense of the delayed realisation of potential office demand and supply hence the growth of the local office market. However, there is not yet detailed statistical support for this issue.

Figure 5. Guangzhou A Grade office historical returns



Source: (DTZ, 2004)

Land supply, state control and cycles

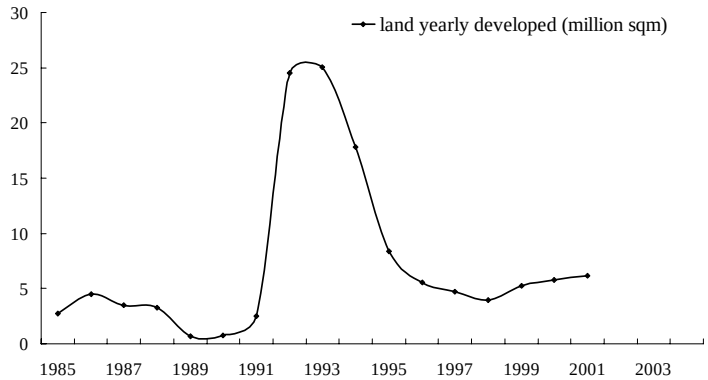
Based on the consensus that the successful economic transition needs to balance the dual force of stability and growth, the state as the owner of urban land dominates primary land supply and has a direct impact on its pricing and use. Given the strong demand for office land use in Guangzhou, office land supply is a key driver of office cycles. The analysis of land price fluctuations, the demand-supply imbalance and its impact on the office submarket system are linked to urban land policy, which triggers or smoothes cycles; the mechanism of competitive land use in the user and investment markets then has further impacts on land supply.

Non-market land supply approach without market pricing, such as direct allocation or land release agreement, was not officially ended until the formal release of the State

Land Bureau order (CSMB, no.11) on July 2002 (CLMB, 2002), which will however take more years to be fully enforced (Niu et al., 2004). The critical role of the urban land tenure system in the economic and political spheres and the complexity of the transformation, particularly the unique mixed forces of state monopolised pricing and market competitive pricing, have distorted the market mechanism in allocating urban land use, and has a substantial impact on the timing and the level of market cyclicity in the office market.

Classical theory suggests land value in property investment process is a residual of market value and development cost, or the opportunity cost for competing land use based on market demand. From the developer's perspective, profit margin is a dependent variable of sales price and total development cost of which land cost is an important part. During the period of 'free expansion' of urban land release through the SOEs reform and uncontrolled urban fringe land supply, a large portion of land was allocated or sold with non-market prices which opened loose holes for obtaining land with extreme low costs. The extremely low cost of land reflected the unique land tenure system in China that is transforming from public ownership to a more sophisticated mixture of public and private ownership. It created the incentive in the form of private returns for over investing or over-building without prudent concerns of financial and managerial capacities, which in turn led to land booms in a number of cities and severe cycles in their property investment and development submarkets (refer to figure 6). During the recession, when the state financial and land supply policies became restrictive, the immature land market mechanism and the unclear tenure system also substantially boosted the transaction cost in the land market, hence delayed the market from self-recovery. Interviews with the local legal sector suggested that unclear land and project rights and obligations are a main problem in office building-related disputes (interviews #2, #7, #33). Given the distorted price mechanism, investors are either over-optimistic or over-pessimistic about changes in the marketplace as is common in most immature markets.

Figure 6 Guangzhou annual land development



Source: GZBS (1996-2004)

The direct link between structural change and immature price system is also shown in the behaviour of major land holders. State-owned enterprises often use land as equity to form joint-ventures in property development projects. As land was obtained with low cost, SOEs developers often lack the incentives to explore more efficient use or appropriate return from collaborative property development projects. Thus, the opportunity cost embedded in the process is transferred to investors such as foreign or private firms, which yield them high equity returns that could easily mislead the market to oversupply certain types of buildings. Major state-owned developers such as City Development Group in Guangzhou and Peichen Group in Beijing are initially allocated large amount of inner city land lots. In the development of the Tianhe commercial district, SOEs developers such as the City Development Group held most premium land lots as part of the 'reward package' for their preparation of sports facilities for the 6th Nation Games. While transforming into commercial entities and holding large land reserves, they are however lack of the incentive to take commercial property development risks. This is confirmed by interviews with SOEs developers (interviews #4, #30, #32, #10) which suggest the recent upswing in the office sector is directly related to state-led commercial district development, in other words: it is a state-led office supply cycle.

Conclusions

This study concerns the macroeconomics of the Chinese commercial property market. It shows that, in terms of the emerging property market system in China, the study of the Guangzhou and Hainan property cycles has demonstrated the nation-wide structural transformation process. Although cycles in different markets in China may vary in terms of lead-and-lag, they nonetheless are substantially similar in terms of the underlying mechanism. Largely due to the specific socio-economic conditions, Hoyt (1947) suggested that no two cities are the same in terms of cyclical behaviour. But there could be similarity in terms of underlying drivers and structural settings, which is the case in China.

The economic transition is about the transformation of the entire economic structure in China. The whole process of system change has substantially affected the cyclical behaviour of the commercial property market system in China. It has been the central mechanism of office cycles in China and the structure-equilibrium analysis in the commercial property submarket systems in Guangzhou and Hainan support this view. Based on the examination of the property sub-markets that link to various parts of the general economy, evidence from the analysis shows that all major components in the property market that can affect market cyclicality is directly related to the structural change, therefore it has been the underpinned driver of commercial property cycles in China. Thus an extension of the thesis is that office cycle in mature markets, just like the business cycle in capitalist system, are chiefly shaped by the existing market structure, e.g., the social, economic and political structure. Office cycles in emerging markets, especially those under transition, are chiefly shaped by its continuously emerging structure. Therefore, they remain to be different type of cycles because each

underpins a socio-economic structure that is linked to a specific stage of economical and societal evolution.

Radical change altered the formal structure (i.e. the designed structure) of the market (social) system, including the property market structure, but cannot alter the informal structure (i.e. the emergent structure) at the similar rate. As the study shows, cycles in the commercial property market in the economic transition is largely a key resulting feature of the continuous structural change both at formal and informal levels in a way that is often imbalanced and not always consistently changing together. The same situation also applies to the transformation of inner-city built form, which is featured by the delaying physical building stock change against the trend of space demand underpinned by the socio-economic transition. Simply put, there is a supply lag, mainly in the form of changing land use and replaced building stock, against economic change (the business cycle). This affects the level of effective demand for office space and hence becomes a major force in shaping current office cycles. The supply lag also links social cycle theory to the physical built environment and is useful in extending the current property cycle theory. This also links to issues in urban development and regeneration processes, e.g., planning approval, urban land supply and general building lag. To a certain extent, the Chinese property cycle is a special case of property cycle theory that is influenced by institutional changes.

Finally, in regard to the state-led nature of the Chinese economic transition and the important role of the state in the commercial property cycles, the analytical results also suggest the important role of the urban planning system, including its commercial property development and city re-development related policy-making and enforcement process. After all, urban planning is a heavily state-driven practice which is consistent with the state-led economic transition. The political economy of the state and market interplay is the key to generate cycles in emerging commercial property markets.

Appendix – interview list

Code	Name	Institution	Nature	Status	Main concern and focus of talk	Date
#1	Lee	Legislative council	Legislative body	Senior member	Legislation and property market change	Nov-04
#2	Cao	Court	Legal system	Senior Judge	What affect property market change	Jan-05
#3	Ying	Planning Department	Government	senior planner	Planning and office market change	Nov-04
#4	Lau	Commercial developer	Property development	Associate director	Local developer's perspective on market formation	Nov-04
#5	Wong	Law firm	Legal practice in property	Senior lawyer/director	Changes of CBD and office market performance	Oct-04
#6	Lee	Major Consultancy firm	Proeprty consultancy	Associate director	Guangzhou office market history, current condition & data	Nov-05
#7	Ding/Zh	Court	Legal system	Senior Judges	Property rights issues and market behavior	Nov-05
#8	Xiao	Domestic law firm	Residential office user	Director/senior lawyer	Residential office 'problem' in Guangzhou	Nov-05
#9	Wang	Major law firm	A grade office occupier	Director/senior lawyer	Property management & market demand	Nov-05
#10	Jip	Commercial developer	Office development	Senior analyst	Office market formation, performance and drivers	Nov-05
#11	Wong	consultant firm	Property consultancy	Senior analyst	Office user market formation and performance	Nov-05
#12	Leuong	Major finance provider	SOEs bank	Manager	Lending policy and recent behavioural change	Nov-05
#13	Chan	Major finance provider	SOEs bank	Senior manager	Lending policy upon commercial proerty development	Nov-05
#14	Wang	University	Property expert	Associate Professor	State (land/funding) control, source of fund, vacancy issue	Nov-05
#15	Chan	Major Consultancy firm	Property consultancy	Director/senior manager	Office market formation, performance and drivers	Nov-05
#16	Xun	Academic institution	Commercial property expert	n/a	Commercial property in Guangzhou	Nov-05
#17	Mar	Major consultancy firm	property advice and analysis	Senior analyst	Government's role and the problem of planning	Dec-05
#18	Han	Major development firm	commercial property developer	Senior analyst	Office effective demand and market maturity	Jan-06
#19	Liu	Research institute	Property expert	Professor	Mechanism of property cycles in China	Nov-04
#20	Wang	Major market research firm	Consultancy/ data provider	Research director	Chinese property cycle research, data issue, policy impact	Nov-04
#21	Yin	Major research institute	Finance expert	Senior researcher	Government's role and property market performance	Nov-04
#22	Zhang	Major Office user/owner	Major A grade office occupier	Senior property manager	Office cycles and main drivers	Nov-04
#23	Sen	University	Property expert	Junior researcher	History of property market changes and main reasons	Nov-04
#24	Yi	Major research institute	Finance expert	Senior research fellow	Importance of government policy	Nov-04
#25	Zhang	Major consultancy firm	Property consultancy	Senior manager	Office market formation, performance and drivers	Nov-04
#26	Qin	Major consultancy firm	Property consultancy	Senior analyst	Office market formation, performance and drivers	Nov-04
#27	Kuang	Major research institute	Property research	Senior researcher	Changes and mechanisms of property (housing) markets	Nov-04
#28	Wang	Major newspaper in building	Reporter	Assisant editor	Office market immaturity and behaviours	Nov-04
#29	Lu	Major IT firm	A grade office owner occupier	Senior property manager	An owner occupier's perspective about office market	Nov-04
#30	Zhang	Major local developer	SoEs developers	Senior process	Policy and property market stability	Nov-04
#31	Cao	Trade and investment firm	Domestic business firm	Senior manager	Major drivers of proerpty market in China	Nov-04
#32	Tian	Property developer	Domestic developer	Director	Emerging of property market	Nov-04

Code	Name	Institution	Nature	Status	Main concern and focus of talk	Date
#33	Fan	Court property division	Legal system	Senior judge	Institutional structural change and market behaviour	Jan-05
#34	Hu	Major property manager	Property management	Development manager	Market history & demand source,nature	Jan-06
#35	Wong	Investment firm	A grade office occupier	Senior manager	User's perspective of demand and market condition	Jan-06
#36	Chan	Business investment firm	A grade office owner occupier	owner	An office investment perspective	Jan-06
#37	Zhu	Law firm	A grade office occupier	lawyer	User market demand and conditions	Jan-06
#38	Zhang	Business investment firm	A grade office occupier	Senior manager	Main concerns about office user decision	Jan-06
#39	Lui	Tourist business firm	A grade office occupier	Manager	Main concerns from office user perspective	Jan-06
#40	Huang	Business investment firm	A grade office occupier	director	Main concerns from office user perspective	Jan-06
#41	Zhang	Foreign trade company	A-B grade office occupier	Business development	Main concerns from office user perspective	Jan-06
#42	Wong	Insurance firm	A grade office occupier	HR manager	Main concerns from office user perspective	Jan-06

(**The following interviews were not conducted due to various reasons)

Code	Name	Institution	Status	Status
1	Hue	Property development firm	SOEs major developer	Director
2	Xie	Property association	Property expert	Editor
3	Hue	Land management Department	Land use planning	Senior official
4	Liu	Property consultancy firm	Major consultant	Director
5	Zhong	Lang Archive	Government agency	Manager
6	Chen	Major newspaper in building	Property media	Newspaper chief editor
7	Wong	Major research institute	Property expert	Senior research fellow
8	Mao	Major property investor	International investor	Manager
9	Lao	Construction committee	Government agency	Manager
10	Lee	Planning department	Government agency	Planner

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