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THEME PAPER

Sustainable Urbanization in Real Estate Sector – Hong Kong

Theme Paper

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The RCCREE is the Hong Kong Polytechnic University Centre for solution oriented research and consultancy in construction and real estate economics. It undertakes internationally relevant multi-disciplinary research that supports the advancement of the construction and real estate industries in the following areas: Economic Policy and Institutional Analysis, Real Estate Economics, Construction Economics, Housing, Human Behaviour in Economic Decision making, and Value Management and Facilities Performance. For further information, please contact Professor Francis K.W. Wong, Director of RCCREE (bskwwong@polyu.edu.hk) or Professor Eddie C.M. Hui, Deputy Director (bscmhui@polyu.edu.hk).

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COUNTRY REPORT ON SUSTAINABLE URBANIZATION IN THE REAL ESTATE SECTOR

[As at 26 October 2010, 1.00 VND = HK\$ 0.0004; US\$ 1 = HK\$ 7.77]

1. EXECUTIVE SUMMARY

According to the Council for Sustainable Development (CSD, 2010), "a sustainable built environment is a built environment that is well balanced for the needs of the present and the future from the economic, social and environmental perspectives". This country report explores the current situation of sustainable urbanisation in the real estate sector of Hong Kong with respect to the three perspectives stated above. Firstly, it summarises the current economic situation of Hong Kong in general and of the real estate market in particular. This includes the initiatives and measures that have been taken to improve the real estate market as well as the whole economy. Secondly, it summarises social policies that are developed for urban planning and land using. Important policies include multiple intensive land use, sustainable building design features, assistance to low-income families, rail-led transport planning, public housing, etc. Thirdly, it summarises key environmental policies, such as urban renewal and heritage preservation, site coverage of greenery, etc., which are developed for environmental protection.

2. MACRO ECONOMIC REVIEW AND OUTLOOK

2.1 Overview of Hong Kong's economy

Following the "global financial tsunami" (which was highlighted by the bankruptcy of the US financial house Lehman Brothers and the takeover of Merrill Lynch) in September 2008, Hong Kong's economy suffered a heavy blow in the latter half of 2008 and the trough continued until the end of the first quarter of 2009. After the announcement of a series of stimulus measures by the Hong Kong government, Hong Kong had staged a strong rebound since the second quarter. According to the Financial Secretary, Mr. John C Tsang (2010), GDP expanded by 2.6% in the fourth quarter of 2009 after four straight quarters of negative growth. In 2009, the GDP shrank by less than expected (-2.7%) and the GDP per capita was HK\$233,060 (US\$30,100). The inflation rate was 0.5%, while the unemployment rate was 5.2%. Total trade in goods and services reached HK\$5,198 billion and HK\$1,014 billion respectively.

Among all measures that are used to consolidate the recovery and enhance economic development, some are related to sustainable urbanization. For example, the Hong Kong government offers a HK\$300 million Pilot Green Transport Fund to encourage the transport sector to test out green and low-carbon transport technology, and provides another HK\$540 million to subsidise the replacement of Euro II diesel commercial vehicles. In addition, the government optimises land resources by revitalising old industrial buildings and reserving sites for our industries, and increases capital works expenditure to HK\$49.6 billion in 2010-2011.

2.2 Main economic indicator (Refer to Table 2.1)

For 2009 as a whole, the economy contracted by 2.7% in real terms, the first annual recession since 1998. Opposite to the original estimate by the Hong Kong government, the city turned out to achieve a budgetary surplus of about HK\$25.9 billion in the fiscal year of 2009/2010 (ended on 31 March 2010), which was attributed to high land premiums and huge revenues from stamp duties in both the stock and property markets.

As the Financial Secretary of Hong Kong, Mr. Tsang (2010), in his speech for "Budget 2010-2011", expressed that he remained cautiously optimistic about Hong Kong's economic prospects for 2010. He expected that Hong Kong might have a surplus of HK\$13.8 billion for the year of 2010 as a result of revenue from stamp duties and land sales, and forecasted GDP to grow by 4-5% with an underlying inflation forecast at 1.5% in 2010.

Hong Kong's economy in the last year was stronger than expected. It expanded by 8.2% in the first quarter of 2010, the fastest pace in four years, as exports and retail spending rebounded from the global financial tsunami. China's economic comeback provides the favourable condition for driving the city's growth.

The unemployment rate slid to a 15-month low of 4.4% in the first quarter of 2010. Although that was still higher than the 3.3% level before the financial tsunami deepened in late 2008, the continual improvement in the labour market boosts spending, one of the sources for economic recovery. This may partly prove that the government's measures adopted to stimulate the labour market work effectively.

	2005	2006	2007	2008	2009						
GDP and Components											
GDP in chained (2008) dollars (HK\$ million)	1,440,343	1,541,450	1,639,826	1,675,315	1,629,057						
GDP at current market price (HK\$ million)	1,382,590	1,475,357	1,615,455	1,675,315	1,632,284						
GDP growth (%)	7.1	7.0	6.4	2.5	-2.7						
Primary sector (HK\$ million)	947	942	1,009	920	n.a.						
% growth	-1.1	-0.5	7.11	-8.9	n.a.						
Manufacturing sector (HK\$ million)	45,547	45,761	39,319	38,710	n.a.						
% growth	2.5	0.4	-14.1	-1.5	n.a.						
Services sector (HK\$ million)	1,207,873	1,297,545	1,431,815	1,441,908	n.a.						
% growth	7.9	7.4	10.4	0.8	n.a.						
Construction sector (HK\$ million)	38,538	38,688	40,153	47,922	n.a.						
% growth	-4.6	0.04	3.79	19.3	n.a.						
Demographic Indicators											
Population	6,837,800	6,909,500	6,963,100	7,008,900	7,026,400						
% growth	0.6	1.0	0.8	0.7	0.5						
Total labour force	3,534,200	3,571,800	3,629,600	3,648,900	3,676,600						
% growth	0.6	1.2	1.6	0.5	1.3						
Unemployment rate (not seasonally adjusted)	5.6	4.8	4.0	3.6	5.2						
Financial Indicators											
Changes in consumer price index (%)	1.0	2.0	2.0	4.3	0.5						
Changes in GDP deflator (%)	-0.1	- 0.3	3	1.5	0.2						
Short term interest rate* (%)	3.65	3.29	1.96	0.05	0.07						
Long term interest rate** (%)	4.18	3.73	3.44	1.19	2.58						
Annual average exchange rate with \$US (HK\$)	7.777	7.768	7.803	7.783	7.756						

Notes

n.a.: data not available

Sources:
GDP, Demographic and Financial Indicators:

Government of the HKSAR web-page at http://www.censtatd.gov.hk/hong_kong_statistics Short and long term interest rates:

Monthly Statistical Bulletin, Hong Kong Monetary Authority.

<u>Table 2.1 – Macro-Economic Indicators</u>

^{*} yield of 91-day Exchange Fund Bills

^{**}yield of 10-year Exchange Fund Notes

3. OVERVIEW OF REAL ESTATE MARKET

3.1 Overview of real estate market (Refer to Table 3.1)

3.1.1 Development process of real estate market during the past years

With a land area of only 1,104 sq. km., land supply in Hong Kong is extremely limited. Thus, Hong Kong has long been argued of having expensive residential property prices.

In the early to mid-1990s, a property boom occurred in most of the Asia-Pacific property markets, including Hong Kong. There was high growth in investment returns in property markets, attracting much local and foreign capital. After the Asian financial turmoil in 1997, property and stock prices have dropped by a large amount until 2003. An over-supply emerged, which led ultimately to a "negative-equity" situation in the property sector. In time, lending rates increased, leading to further falls in property prices, while vacancy rates climbed. In July 2003, residential property prices began to pick up again and rose by 63% (62% in real terms) until May 2005. The housing market stalled in the first half of 2006, and then increased by 32.4% (23.5% in real terms) from August 2006 to August 2008. In the second half of 2008, the "global financial tsunami" stopped the growth of the housing market. Given a set of measures raised by the local government, the housing market recouped much of the ground lost during the crisis. As regards residential, commercial and industrial property, both market activity and transaction volume rose substantially in the second quarter of 2009. When compared to the previous quarter, the number of registrations increased substantially by 121% in the residential market, 144% in the office market, 158% in the retail market and 112% in the industrial market.

On the other hand, in order to provide a shelter to those who could not afford to live in private housing, Hong Kong has established one of the largest public housing sectors in the world. Public housing in Hong Kong began as early as the 1950s as a way to provide those who suffered from wars and calamities with temporary housing. In the 1970s, the government changed its policy to provide permanent public housing. Figures indicate that as of 2009, 47.1% of the total population (around 3.3 million people) live in public housing. Of this population, 29.1% live in rental flats while 18.1% live in private flats subsidized by the government.

PRIVATE SECTOR										
	2005	2006	2007	2008	2009	2010	2011			
Private Domestic (No. of units)	17320	16580	10470	8780	7160	14260	10960			
Small/medium units (No. of units)	16250	15130	9730	7600	4740	12830	9320			
Large units (No. of units)	1070	1450	740	1180	2420	1430	1640			
Private Office ('000 m²)	34	108	320	341	151	122	130			
Grade A ('000 m²)	30	92	286	331	129	113	103			
Grade B ('000 m²)	2	9	31	9	19	7	27			
Grade C ('000 m²)	2	8	3	1	3	2	0			
Private Commercial ('000 m²)	111	183	48	49	84	82	56			
Private Flatted Factories ('000 m²)	0	0	16	70	3	69	39			
Private Industrial/Office ('000 m²)	4	0	0	4	0	0	0			
PUBLIC SECTOR										
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11			
Public Housing (No. of units)	24682	17153	7192	13726	19050	15389	n.a.			

Notes

n.a.: data not available.

Data for the Years 2010 and 2011 are provisional.

As defined in the 2010 Hong Kong Property Review:

Private Domestic units are "independent dwellings with separate cooking facilities and bathroom (and/or lavatory)".

Small/medium units comprise "units with a saleable area of less than 100m², and large units comprise "units with a saleable area of 100m² or above."

Private Office "premises comprise premises situated in buildings designed for commercial/business purposes. Excluded are non-domestic floors in composite buildings. Offices are graded as follows: Grade A - modern with high quality finishes; flexible layout; large floor plates; spacious, well decorated lobbies and circulation areas; effective central air-conditioning; good lift services zoned for passengers and goods deliveries; professional management; parking facilities normally available. Grade B - ordinary design with good quality finishes; flexible layout; average-sized floor plates; adequate lobbies; central or free-standing air-conditioning; adequate lift services, good management; parking facilities not essential. Grade C - plain with basic finishes; less flexible layout; small floor plates; basic lobbies; generally without central air-conditioning; barely adequate or inadequate lift services; minimal to average management; no parking facilities."

Private Commercial "premises include retail premises and other premises designed or adapted for commercial use, with the exception of purpose-built offices. Carparking space is excluded."

Private Flatted Factories "comprise premises designed for general manufacturing processes and uses, including offices, directly related to such processes, and normally intended for sale or letting by the developers."

Private Industrial / Office "premises are floor space designed or certified for industrial/office use."

Public housing has been provided by the Hong Kong Housing Authority (HA), which is a statutory body established in April 1973 under the Housing Ordinance. There is also the Hong Kong Housing Society, which is a non-government organization established mainly to provide subsidized rental housing to qualified people. However, the annual production of rental flats has been zero since 1998 until 2008 when there were 872 units completed (http://www.hkhs.com/eng/info/annual.asp). Their annual production is hence not reported in this Table.

Sources:

Private Sector: 2010 Hong Kong Property Review. Rating and Valuation Department. Public Sector: Hong Kong Housing Authority, http://www.housingauthority.gov.hk/en.

Table 3.1 – Breakdown of Real Estate Market

3.1.2 Key lessons of success and failure

Policies coming into effect may not be effective due to different reasons. Some policies may work initially but become ineffective when the situation changes. Some Hong Kong experiences are given below.

In order to assist low-income families to purchase their first homes, Hong Kong Housing Authority (HKHA, 2010) offers three schemes:

- Home Ownership Scheme (HOS) HOS flats are subsidized by the government. The scheme was run successfully during the boom period. However, when residential property prices continually fell from 1997 to 2003, the scheme had been temporarily stopped since 2003. The scheme was resumed in 2007 so that the last remaining batch of HOS flats could be sold. These flats were sold out recently.
- 2. Tenants Purchase Scheme (TPS) The scheme offered those tenants in public rental flats to buy the flats at a price lower than the market price. However, due to the sharp drop of residential property prices over the years since 1997, selling under the TPS was stopped in 2005 in order to stabilise the housing market.
- 3. Home Assistance Loan Scheme (HALS) Since 2003, the government offered low-income families interest-free loans that could be payable up to 20 years to buy their first homes. After evaluation, the HALS was halted in 2004. The main reason was that most loan borrowers were not able to pay their loan instalments when their properties became "negative-equity".

Another experience came with the then chief executive Tung Chee-Hwa who pledged in 1997 to construct 85,000 units of residential properties in the next three years. The purpose of it was to cool down the rapidly growing residential property prices that peaked towards the end of 1997. However, in the wake of the Asian financial turmoil, the plan contributed to a dramatic plunge in house price. From its peak in 1997, residential property prices fell by 66.1% (61.8% in real terms) in mid-2003.

3.2 Planning and land using in Hong Kong

Traditionally, the Hong Kong government has raised revenue from the sale and taxation of land but not engaged in industry and commerce for profit. From its revenues, the government has built roads, schools, hospitals, and other public infrastructure facilities and services.

3.2.1 Urban planning

Hong Kong needs an urban infrastructure in support of economic development. With the principle of sustainable development, urban planning seeks to bring about an organised, efficient and desirable place for the community to live and work in. However, usable lands in Hong Kong are very limited. According to Ye (1998), Hong Kong consists of peninsula and islands dominated by hilly terrain in south subtropical zone. About 84% of the total area is slope, which is unfavourable for urban and agricultural development.

Only 16% is small plains, which has almost been used as urban areas. As land suitable for development is scarce, urban land use is of primary concern and there is a need to strike a balance in utilising for housing, commerce, industry, transport, recreation, nature conservation, heritage preservation and other community needs. For more information about urban planning in Hong Kong, refer to the website of Planning Department (2010).

For urban planning that involves sustainability, the Buildings Department of the Hong Kong government has recently commissioned a consultant to study the ventilation performance under different degree of building permeability and separation (Buildings Department, 2009). The consultant has provided three key guidelines about sustainable building design features that are described below:

- (1) Building separation Intervening spaces are used to separate buildings in large development sites so that "air ventilation and environmental quality of pedestrian level" can be enhanced while "urban heat island effect" can be mitigated. This guideline should be applied to "site area not less than 2 hectares or buildings with a continuous projected façade length greater than 60 metres".
- (2) *Building setback* This guideline is applied to "pedestrian zone for developments abutting narrow streets less than 15 metre wide" for the purpose of enhancing "air ventilation and environmental quality of pedestrian level" as well as mitigating "deep street canyon effect".
- (3) Site coverage of greenery This is the provision of greenery to various site areas such that "the environmental quality of living space" can be improved while "urban heat island effect" can be reduced. This guideline is applied to "sites larger than 1,000 square metres". It is necessary to use up about 20 to 30% of the site areas for fixed planting areas. Although it is preferable to plant near pedestrian for wider public interests, other locations at ground floor, podium, roof and other levels are not ruled out.

Apart from the above sustainable urban planning guidelines, Hong Kong has also established a highly developed and sophisticated transport network, encompassing both public and private transport, which is part of the infrastructure that supports sustainable urbanisation. Over 90% of the daily journeys in Hong Kong are on public transport, making it the highest rate in the world (Lam, 2003). In addition to taxis, buses and ferries that have also been widely used in other countries, the public transport that runs within the city includes public light buses, peak trams, light rails and mass transit railway (MTR). Of all these transport types, the MTR system is known to be the most widely used transport in Hong Kong. It first began service in 1979 as the government would like to establish a mass transport system that can solve traffic jam in the city. After merging with the Kowloon-Canton Railway (KCR) network, the MTR represents the biggest network in Hong Kong. Under the government's rail-led transport policy, the MTR system offers efficient and affordable public transport with over 4 million trips made in an average weekday (Civic Exchange, 2004). As of first-half 2009, the MTR has a 42% market share of the franchised public transport market, making it the most popular transport option in Hong Kong (MTRC, 2009). Since its launch in

September 1997 for use on the MTR, the Octopus card, which is a rechargeable contactless smart card used in an electronic payment device in all MTR stations, has provided a payment alternative to the traditional banknotes and coins. Most MTR travellers are using the Octopus card nowadays.

3.2.2 Land use resource

Hong Kong has a high demand for urban land utilization because of its limited land resources and the vast expansion of the scale of urban development (Ye. 1998). Of its total urban land, a large proportion has been developed for residential use. Of the total land, only 1.3% is used for commerce, 6.0% for manufacture industries and 14.6% for roads and railways. However, due to its need for urbanization with limited land resources, the Hong Kong government has made the concept of multiple intensive land use (MILU), which can achieve intensification of land use through mixing residential, commercial, recreational, community facilities and transport facilities at higher densities at selected urban locations (Lau et al., 2005). In this multiple land uses concept, the residential component is regarded as the core, which occupies 30 to 65% of the total gross floor area of a high-density, high-rise development. The development is typically surrounded by other components to form the platform, with access to five or more modes of public transport and an accessible network of multilevel pedestrian links that create the necessary variety, vitality and viability.

In order to address public demands for a more spacious and "greener" living environment and for preserving built heritage as well as the natural environment, the Town Planning Board (TPB), a statutory body established under the Town Planning Ordinance, Cap.131, has made several key policies (TPB, 2006):

- Urban renewal and heritage preservation While acknowledging the need for urban renewal, the TPB will inform the Urban Renewal Authority (URA) to initiate development schemes and to make amendments to the schemes to address the concerns of the local residents, particularly "in terms of preserving the cultural heritage and historic features of the area". Examples can be found from the website of the Town Planning Board (TPB, 2006).
- 2. Harbour-front planning In order to protect our harbour front, the Protection of the Harbour Ordinance has established regulations for minimising reclamation. The underlying principles are to promote "public enjoyment of the harbour-front", improve "connectivity between the harbour-front and the inland areas", enhance "the landscape proposals and urban design" and reprovision "affected existing uses". Each urban design project will take into account major viewpoints (such as the Harbour-Front Enhancement Committee), the Urban Design Guidelines and other relevant considerations (such as extensive public engagement exercises).
- 3. Incorporation of building height and/or plot ratio restrictions on outline zoning plans (OZPs) While the Board recognises that public demands

- for the preservation of ridgeline and views of Victoria Harbour has been increased, it has incorporated building height control for a number of OZPs. As the Board wrote, "this has enabled appropriate controls to be put in place to help safeguard unobstructed views towards Victoria Harbour and to preserve the existing character of some residential neighbourhoods."
- 4. Rural planning A new Development Permission Area (DPA) Plan was prepared to "protect the natural habitat from disturbance, conserve the rural character and accord planning control and guidance for future development". Also, the Plan stated that "the majority of the Area is designated as "Conservation Area" buffered by "Green Belt" to protect the continuous woodland, the ecologically significant stream and the mangroves in the "Coastal Protection Area" zone along the sensitive coastlines". The substantial flat land in the heart of the Area is intended for agricultural use and for village expansion.
- 3.2.3 Issues of social housing policy and public housing provision for the less well off

The Hong Kong government has implemented policies for the needy and the elderly through Hong Kong Housing Authority and Hong Kong Housing Society (THB, 2010). The Housing Authority is a department under the Transport and Housing Bureau (THB) of the Hong Kong government, while the Housing Society is a public organisation for subsidised public housing.

Public Rental Housing (PRH) for the Needy is the government's housing policy to provide subsidised public housing for citizens who cannot afford private rental housing (THB, 2010). It sets the eligibility criteria for selecting the eliqible citizens for PRH. A waiting list has also been produced for those who are eligible but have not yet been offered a PRH unit. The government aims at maintaining the average waiting time for PRH for general family applicants at around three years. Under the policy, there is Harmonious Families Priority Scheme, which aims to shorten the waiting time by six months for those who choose to live with or in close proximity to their elderly parents/relatives. PRH estates in Hong Kong are grouped in four districts, namely Urban, Extended Urban, the New Territories, and the Islands. Since there are insufficient PRH units provided in the urban areas, applicants can only choose one district among the three non-urban areas for their future housing selection. However, applicants who qualify to join the Single Elderly Persons Priority Scheme, the Elderly Persons Priority Scheme and the Harmonious Families Priority Scheme (described in later paragraph) and opt to live with the elderly person(s) in one flat may choose PRH units from any one of the four districts.

Hong Kong Housing Authority and Hong Kong Housing Society offer different types of public housing subsidies to the elderly to address their housing needs. The major schemes are described below (THB, 2010):

1. *Priority Public Rental Housing Schemes* – Hong Kong Housing Authority offers three main types of priority schemes for the elderly in need of PRH: (i) "Single Elderly Persons Priority Scheme for those who wish to live

- alone", (ii) "Elderly Persons Priority Scheme for two or more elderly persons who are willing to live together", and (iii) "Harmonious Families Priority Scheme for those families who opt to live with or close to their elderly parents or relatives".
- 2. Special Housing for the Elderly Scheme Both Hong Kong Housing Authority and Hong Kong Housing Society provide special flats that are fit for the elderly. The Housing Authority provides the elderly with two main types of housing in public rental estates: (i) "Housing for Senior Citizens units which come with communal and recreational facilities under the care of a warden", and (ii) "Self-Contained Small Flats which are equipped with facilities such as non-slippery floor tiles and single lever taps to cater for the needs of the elderly". The Housing Society also offers approximately 900 rent-discounted flats for eligible elderly people.
- 3. Housing Society Elderly Resources Centre The Housing Society Elderly Resources Centre provides elderly comprehensive services, which are aimed to cope with changing home facilities needs of the elderly. By the provision of education and assessment of current physical conditions and home safety, the Centre can help elderly people understand their physical needs and the potential risks at home to reduce home accidents. The Centre also provides "one-stop referral services" to facilitate the services for the elderly.
- 4. Building Maintenance Grant Scheme for Elderly Owners The scheme is intended to offer financial assistance to elderly owner-occupiers to upkeep their building safety by repairing and maintaining their self-occupied buildings. The maximum grant available for each eligible elderly owner-occupier within a period of 5 years is HK\$40,000.

3.3 Finance sources for sustainable urbanization in real estate sector

3.3.1 Financial crisis and issues related to real estate

Hong Kong housing market was seriously affected by the global financial crisis (also known as the financial tsunami), but after falling 17% (18% in real terms) from June to December 2008, Hong Kong's residential price index rebounded and rose by 20% (21% in real terms) from last year's bottom to August 2009. It is believed that this situation is attributed to three main causes (from anonymous writers):

- The government immediately implemented measures to stabilise the Hong Kong's financial sector. Measures were mainly used to enhance the liquidity that can be accessed by banks so that mortgage loan could be issued. For the whole year of 2009, the number of sales and purchase agreements for residential property received by the Land Registry jumped by 20%. Total consideration for the agreements rose by approximately 24% to HK\$425.8 billion (EAD, 2010).
- 2. Borrowers enjoy low interest rates in Hong Kong. The Hong Kong best lending rate, the basis for mortgage interest rates, is computed based on the US Federal Funds rate and the average of the interbank interest rate. The changes in interest rate policy caused the Hong Kong best lending rate to drop. While the US Federal Funds rate dropped to 0.13% in May

2009 from 1.5% in October 2008, the Hong Kong best lending rate fell by 0.25% from 5.25% in October 2008 to 5% in September 2009. Due to the drop in the Hong Kong best interest rate, the interest rates of major banks are as low as 3.25% below the best lending rate. This benefits most borrowers because more than 90% of housing loans in Hong Kong are based on variable interest rates.

3. A massive influx of buyers from mainland China has been another cause. The Chinese government implemented a stimulus package amounting to RMB4 trillion (USD585 billion) in November 2008, resulting in a surge of mainland buying in Hong Kong. As much as 40% of new-home sales buyers are cash-rich mainland Chinese according to the *Wall Street Journal*.

3.3.2 Sources of funds

In order to respond to the global financial crisis, the Hong Kong government implemented liquid-enhancing measures to protect Hong Kong's financial sector (HKMA, 2010). These measures are listed below:

- 1. From September 2008 to March 2009, the Hong Kong Monetary Authority (HKMA) enhanced the access to liquidity available to banks, including longer borrowings from the discount windows and foreign exchange swaps.
- 2. In October 2008, the Financial Secretary established the Contingent Bank Capital Facility (CBCF), which can offer additional capital available to banks. The CBCF is in effect until the end of 2010.
- 3. In November 2008, the HKMA refined the September 2008 measures, furthering the maturity time of the debts in the discount window from one to three months.

The government's rapid response successfully maintained confidence. Bank lending continued, and loans for house purchase increased by 5.1% to HKD593 billion in 2008.

To stimulate growth in borrowing in the mortgage market, the Hong Kong Mortgage Corporation Limited (HKMC, 2010) issued a Fixed Adjustable Rate Mortgage program in October 2009. By the application period lasting until December 2009, borrowers can lock-in a predetermined interest rate for an agreed lock-in period.

3.3.3 Domestic banking sector and capital markets

The HKMA sets the guideline for mortgage lending in Hong Kong. Since the housing market recouped too fast and a housing bubble seems to emerge, the HKMA has now changed the loan to value (LTV) ratio of housing loans to 60% for loans valued at HK\$12 million and above. For loans less than HK\$12 million, the 70% ratio remains unchanged.

In March 1999, the HKMC (2010) launched the Mortgage Insurance Programme (MIP) with a view to promoting home ownership in Hong Kong. Specifically, with the MIP providing mortgage insurance to banks, banks can lend out mortgage loans more than the maximum LTV ratio without incurring additional credit risk. The programme criteria are subject to change according to the policy of the government. Currently, as long as an application meets the relevant eligibility criteria (e.g., capping the maximum debt-to-income ratio at 50% for all income groups), the bank can lend a mortgage loan of up to 90% LTV ratio under the MIP, provided that the maximum loan amount is below HK\$7.2 million. For loans with mortgage insurance cover starting from 60% LTV threshold, the maximum loan at HK\$6 million is applicable.

3.4 Operation of the market

3.4.1 Real estate assessment/valuation (property valuation)

In Hong Kong, property market statistics are mainly compiled by the Rating and Valuation Department (RVD, 2010). The RVD publishes a comprehensive set of price, rental and transaction statistics for various types of private residential and non-residential premises in its *Property Market Statistics* on a monthly basis. There are two main types of price statistics: average prices and prices indices.

As shown in their website, "average prices for various types of private properties (for residential, retail, office and factory uses) are expressed in terms of price per square metre of floor area. They are computed based on the actual transaction prices reviewed by the RVD for stamp duty purposes. They are the most straightforward and simplest indicators of the central tendency of property prices of the entire population". However, this method suffers from sampling problems in that the sample of properties differs over time. Thus, changes in average prices between two periods may be due to changes in other characteristics of the sample premises, such as quality and location.

On the other hand, "the price indices are designed to measure changes in prices with quality kept constant. They are derived based on the same set of transaction data for computing the average prices, but using a more sophisticated statistical procedure". It should be noted that like average price statistics, the residential price indices do not include transactions of primary sales (Fan and Peng, 2005). However, transaction prices in the secondary market should be able to reflect the market trend owing to "a relatively high liquidity" in that segment.

3.4.2 Broker system

Under the Estate Agents Ordinance (EAO), "any individual or company practising estate agency work in the course of business or in the course of employment in Hong Kong must hold a valid estate agent's licence (individual or company) or salesperson's licence" (EAA, 2010). Failure to do so is an offence. The holder of an estate agent's licence (individual) is allowed to "carry on the business of estate agency work in the capacity of a sole proprietor, a partner of a partnership, a director of a company or an employee of another licensed estate agent". An estate agent's licence (company) must

have at least one director holding a valid estate agent's licence. A licensed salesperson may be restricted to "only perform estate agency work as an employee of a licensed estate agent".

The Estate Agents Authority (EAA, 2010) was established in November 1997 to be a statutory body under the EAO. As described in its website, "its principal functions are to regulate the practice of estate agency in Hong Kong, promote integrity and competence within the industry, and facilitate training for estate agency practitioners to enhance their standards and status. The EAA organises qualifying examinations, issues licences to individuals and companies, handles complaints against licensees, conducts compliance inspections and metes out disciplinary sanctions to practitioners who have breached the EAO. The EAA also organises activities for the professional development of the trade and promotion of consumer education".

3.4.3 Real estate management

Real estate management practices in Hong Kong are different for private and public properties. For private properties, the owners of a building may appoint a management committee (MC) and establish an owners' corporation (OC) under the Building Management Ordinance (BMO, Cap.344) to manage, control and administer the common areas of the building (HAD, 2010). The OC may employ a manager, a building management agent or a property management company to carry out day-to-day operations on behalf of the owners. All common facilities and amenities including recreational sports facilities shall be maintained in good and serviceable condition and in compliance with the Public Health and Municipal Services Ordinance (Cap.132).

For public properties, the Government Property Agency (GPA, 2010) is responsible for the management of mainly general-use joint-user government offices, governmental quarters, ex-departmental/specialist premises under temporary care-taking by the Agency and some miscellaneous premises. The GPA consolidates its property portfolio into four property management contracts signed with four different property management companies, where two are signed for the Hong Kong Island, one for Kowloon and one for New Territories. The GPA will monitor the performance of the four companies by means of half-yearly Customer Satisfaction Survey, site inspection reports and feedback of end users.

In addition to the Government ordinances that govern the management of properties and facilities, the Property and Facility Management Division of the Hong Kong Institute of Surveyors has developed a guide for day-to-day property and facilities management operations (PFMD, 2008).

4. REAL ESTATE MARKET OUTLOOK FOR SUSTAINABLE URBANIZATION

There are some real estate benchmark indices. Hedonic based property price index is commonly known, but is argued of not being appropriate to be used in Hong Kong since much of the price influencing information is lacking (Chau, 2006). To fit the situation of Hong Kong, local indices have been developed.

4.1 Forecast of real estate market/real estate benchmark index

Department of Real Estate of the University of Hong Kong established the University of Hong Kong's Residential Real Estate Index Series (HKU-REIS, 2010). It is a set of monthly real estate price indices estimated based on repeated sales. The indices reflect the changes in the price levels of real estate in Hong Kong. It is claimed to be the first set of transaction base tradable indices, which can be used for development of real estate derivatives, outside of the UK and US. For details, refer to Chau (2006).

4.2 Methods and tools that use to forecast the real estate market prospect/opportunity

The Centa-City Index and Centa-City Leading Index were developed by the Centaline Property Agency Limited (CPAL, 2010) and the City University of Hong Kong. They are claimed to be the indicators for studying the current movement of property prices in Hong Kong. The Centa-City Index is a monthly index estimated based on all transactions recorded in the Land Registry, while the Centa-City Leading Index is a weekly index estimated based on the current preliminary contract prices obtained from the transactions managed by Centaline Property Agency Limited. The Centa-City Index reflects actual property price movements in preceding months, while the Centa-City Leading Index helps to monitor the up-to-date property price variations. For details of the indices, refer to Centaline's website (CPAL, 2010).

4.3 Methods and tools that use to forecast the real estate market issues and challenges

It is suggested that movements in real estate prices have important implications for macroeconomic and financial stability. When comparing statistics about property prices and banks' exposures to property lending (the ratios of residential real estate loans and commercial real estate loans to total loans), it is able to detect emerging asset quality problems. For details, refer to Fan and Peng (2005).

5. THE SOLUTION OF THE STATE MANAGEMENT TO CONROL AND REGULATE THE PRICE OF THE PROPERTY MARKET

5.1 Policy sectors related to real estate market

The Hong Kong Monetary Authority (HKMA) was established on 1 April 1993 by merging the Office of the Exchange Fund with the Office of the Commissioner of Banking. Its main functions and responsibilities are governed by the Exchange Fund Ordinance and the Banking Ordinance and it reports to the Financial Secretary of the government. It is the government authority in Hong Kong responsible for maintaining monetary and banking stability. For details of their functions, refer to their website.

In addition to the HKMA, there are other bodies that help the government implement policies related to the real estate market. These bodies include Hong Kong Housing Authority, Town Planning Board, Hong Kong Housing Society, the Hong Kong Mortgage Corporation Limited (HKMC), and the Estate Agents Authority (EAA). For their respective functions, refer to previous sections or their individual websites.

5.2 Governmental solution/policy to control and regulate the property market

Since the private property market is a commercial market, the Hong Kong government has maintained a free market economy (or a Laissez-Faire Economy) and does not control the property market (or minimise its intervention in the private property market). However, at times, it would implement policies and measures to stabilise the market when prices surge or collapse. Some major policies and measures have been discussed in previous sections.

6 CONCLUSION

Since the down and up of the real estate market after the global financial crisis, the Hong Kong government has implemented policies and measures to stabilise the market during the past two years. This report has summarised these policies and measures, especially those related to sustainable urbanisation.

7. REFERENCES

- Buildings Department. (2009). Consultancy Study on Building Design that Supports Sustainable Urban Living Space in HK. Consultancy Agreement No. BA/01/2006 (Ronald Lui & Partners), Buildings Department, the Government of the Hong Kong Special Administrative Region (SAR), Hong Kong.
- Centaline Property Agency Limited (CPAL). (2010). *Centa-City Index: Hong Kong's Definitive Price Indices*. Centaline Property Agency Limited, Hong Kong, http://www.centadata.com/cci/notes_e.htm.
- Chau, K. W. (2006) *Index Construction Method for The University of Hong Kong All Residential Price Index (HKAPI) and its sub-indices (HKU-HRPI, HKU-KRPI, HKU-NRPI)*, Versitech Limited, The University of Hong Kong, Hong Kong.
- Civic Exchange. (2004). *Merging Hong Kong's Railways: The Public Interest Perspective*. Civic Exchange, Hong Kong.
- Council for Sustainable Development (CSD). (2010). *Building Design and a Quality and Sustainable Built Environment*. Council for Sustainable Development, Hong Kong, http://www.susdev.org.hk/en/intro.html.
- Economic Analysis Division (EAD). (2010). 2009 Economic Background and 2010 Prospects. Economic Analysis Division, Economic Analysis and Business Facilitation Unit, Financial Secretary's Office, the Government of the Hong Kong SAR, Hong Kong.
- Estate Agents Authority (EAA). (2010). *Types of Licensing*. Estate Agents Authority, Hong Kong, http://www.eaa.org.hk/licensing/types.htm.
- Fan, K. and Peng, W. (2005). Real estate indicators in Hong Kong SAR. Proceedings of a joint conference organised by the BIS and the IMF in Washington DC, 27-28 October 2003, *BIS Paper No.21: Real Estate Indicators and Financial Stability*, (pp. 124-138), Monetary and Economic Department, International Monetary Fund, Basel, Switzerland.
- Government Property Agency (GPA). (2010). *Property Management*. Government Property Agency, the Government of the Hong Kong SAR, Hong Kong, http://www.gpa.gov.hk/english/manage/manage.html.
- Home Affairs Department (HAD). (2010). *Code of Practice on Building Management & Maintenance*. Home Affairs Department Building Management, the Government of the Hong Kong SAR, Hong Kong.
- Hong Kong Housing Authority (HKHA). (2010). *Policies on Public Housing*. Hong Kong Housing Authority, the Government of the Hong Kong SAR, Hong Kong, http://www.housingauthority.gov.hk/en/aboutus/policy/publichousing/0,,,00.html.
- Hong Kong Monetary Authority (HKMA). (2010). *The HKMA*. The Hong Kong Monetary Authority, the Government of the Hong Kong SAR, Hong Kong, http://www.info.gov.hk/hkma/eng/hkma/index.htm.
- Hong Kong Mortgage Corporation (HKMC). (2010). *Our Business: Mortgage Insurance Programme*. The Hong Kong Mortgage Corporation Limited, Hong Kong, http://www.hkmc.com.hk/eng/pcrm/ourbusiness/mip.html.
- HKU-REIS. (2010). *The University of Hong Kong Real Estate Index Series*. The University of Hong Kong, http://hkureis.versitech.hku.hk/.
- Lam, W.H.K. (2003). Advanced modelling for transit operations and service planning. Elsevier publishing.
- Lau, S.S.Y., Giridharan, R. and Ganesan, S. (2005). Multiple and intensive land use: case studies in Hong Kong. *Habitat International*, 29(3), 527-546.

- Mass Transit Railway Corporation (MTRC). (2009). MTR Corporation: 2009 Interim Results. MTR Corporation, Hong Kong.
- Planning Department (2010). *Hong Kong: The Facts*, Town Planning, Planning Department, the Government of the Hong Kong SAR, Hong Kong, http://www.pland.gov.hk.
- Property and Facility Management Division (PFMD). (2008). *HKIS Guide to Good Property Management Practices*. The Property and Facility Management Division of the Hong Kong Institute of Surveyors, Hong Kong.
- Rating and Valuation Department (RVD). (2010). *Publications and Press Releases*. Rating and Valuation Department, The Government of the Hong Kong SAR, Hong Kong, http://www.rvd.gov.hk/en/publications/publications.htm
- Town Planning Board (TPB). (2006). *Town Planning Board Biennial Report 2006-7*, the Town Planning Board, Hong Kong.
- Transport and Housing Bureau (THB). (2010). *Policy / Issues in Focus*. Transport and Housing Bureau, the Government of the Hong Kong SAR, Hong Kong, http://www.thb.gov.hk/eng/policy/index.htm.
- Tsang, J.C. (2010). *The Budget 2010-2011*. The Government of the Hong Kong SAR, Hong Kong, http://www.budget.gov.hk/.
- Ye, S. (1998). The land resource and landuse of Hong Kong. *Chinese Geographical Science*, 8(1), 12-24.