

Assessing Property Price Affordability in Asia

- We assess the extent of “affordability” using common metrics in three active property markets in Asia, namely China, Hong Kong, and Singapore. Specifically, we looked at the proportion of income used for monthly mortgage payments as well as the house price-to-income ratio.
- It is clear that housing affordability in China is facing immense challenges especially in major cities, which explains the recent slew of increasingly harsh measures aimed at keeping residential prices reasonable to the masses.
- For both Hong Kong and Singapore, the situation appears to be relatively more reasonable and within international norms, but low interest rates and capital inflows are fueling anxiety over property prices further.
- Risks to watch out for include the pace of interest rate normalization as well as government policy measures that could potentially change the supply and demand dynamics.

The rebound in asset prices in Asia from their respective troughs in late-2008 to mid-2009 was spectacular. Despite the slew of measures that were introduced to rein in the sharper-than-expected real estate recovery, ample liquidity and credit as well as income recovery continued to drive the markets. Since the trough in June 2009, Singapore’s private residential property price index has rebounded by around 30% while Hong Kong prices have risen by 38.6% from its recent low in Dec 2008.

China Appears Overpriced But Rest of Asia Are Managing

To address the affordability concerns which determine the sustainability of the high real estate prices in Asia, we looked at the proportion of income used for monthly mortgage payments as well as the house price-to-income ratio. For our purpose, the latter provides a simple and intuitive method for comparison. Based on the house price-to-income ratio, residential real-estate (ex-luxury) prices in most Asian cities are still manageable although tier-1 cities in China appear to have been priced beyond most residents in the respective cities.

In Beijing, the house price-to-income ratio can stretch as high as 34.9, using the NDRC house price data. Using data from the National Statistical Bureau yields a ratio of 18.5 under the same assumptions about size and income. But this is still comparatively higher vs those in Hong Kong and Singapore where the ratios were generally below 10. Typically, house prices average 4-8 times annual income in the developed countries. However, we believe data accuracy, particularly on average income, could be an issue in China which might have contributed to the high ratios.

While Hong Kong’s Class ‘B’ residential properties’ price-to-income ratio has rebounded to levels in mid-2008 (before the collapse of Lehman Brothers) and 1998 levels, the mortgage servicing ratio for private households, on average, has remained fairly reasonable at 39.1% of income in March 2010, well-below the 49.4% between 1994 to 2009 and above-100% at the height of the ‘bubble’ in 1997.

Affordability Comparison (2009)						
	SG: HDB Resale	SG: Private Mass Condo	SG: Recent Launches in Central Region	HK Class B**	HK Class B: New Territories	MY: Klang
Price	S\$4,192/sqm S\$389/sqf	S\$7,825/sqm S\$727/sqf	S\$22,513/sqm S\$2,092/sqf	HK\$59,459/sqm HK\$5,525/sqf	HK\$41,019/sqm HK\$3,812/sqf	RM2,084/ sqm
Average House Size (sqm)	90	120	90	56	56	120
Assumed House Cost	S\$377,280	S\$939,000	S\$2,026,150	HK\$3,329,704	HK\$2,297,064	RM250,000
Average Monthly per Capita Income*	S\$4,160	S\$5,666***	S\$5,666***	HK\$16,800	HK\$16,800	RM3,000
House Price vs Income Ratio	3.8	6.9 (9.4 using country av income)	14.9	8.3	5.7	3.5

	China-National	China-Beijing	China-Tianjin	China-Shanghai	China-Chongqing
Price (per sqm****)	RMB4,474	RMB13,224	RMB6,605	RMB12,364	RMB3,266
Average House Size (sqm)	90	90	90	90	90
Assumed House Cost	402,660	1,190,160	594,450	1,112,760	293,940
Av Monthly per Capita Income*	1,997	2,682	1,942	2,728	1,534
House Price vs Income Ratio	8.4	18.5	12.8	17.0	8.0
UOB KayHian Est	8.0	13.7	9.9	12.4	5.5
NDRC House Price Data	14.5	34.9	14.5	23.7	9.5

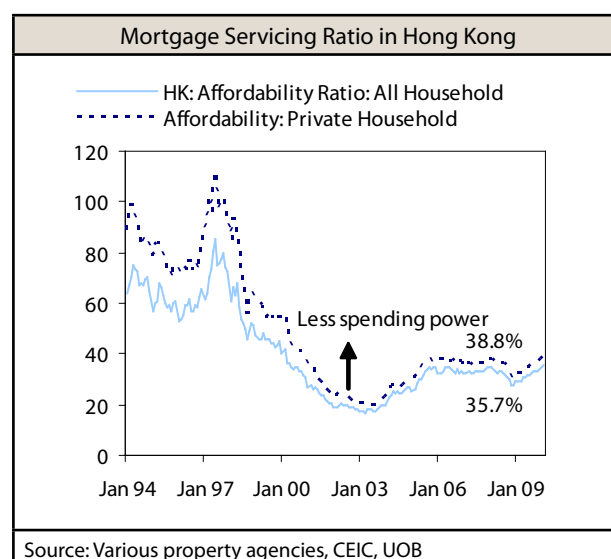
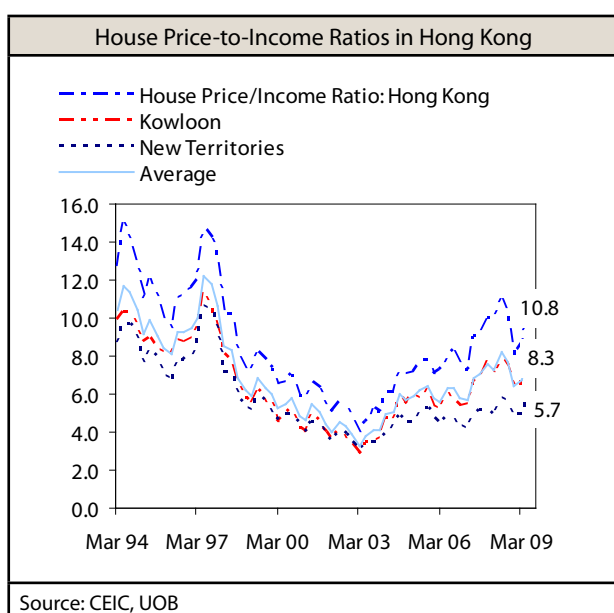
Note: * Based on 2 working persons earning country average income

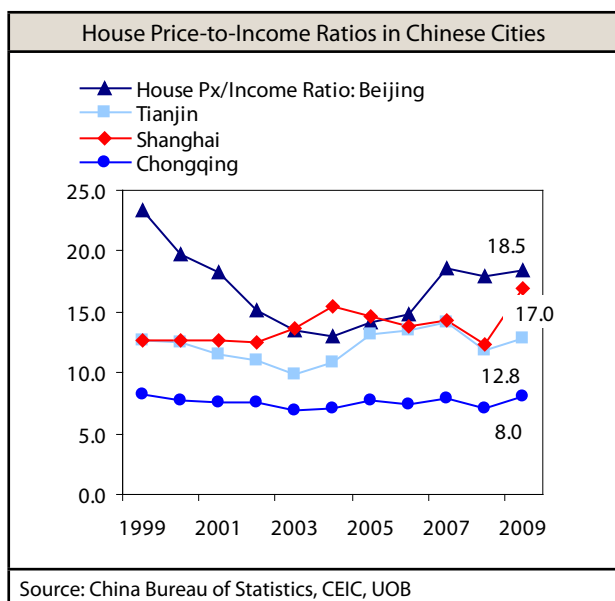
** Average private residences in Hong Kong, Kowloon and New Territories

*** Singapore - Based on median resident household income for those living in condos and private flats/houses of S\$11,331 per month. Ratio is 9.4 based on national average income. Median condo prices (ex-central) from URA are used.

**** National Statistical Bureau Data

Source: CEIC, UOB Calculations





Affordability in Singapore

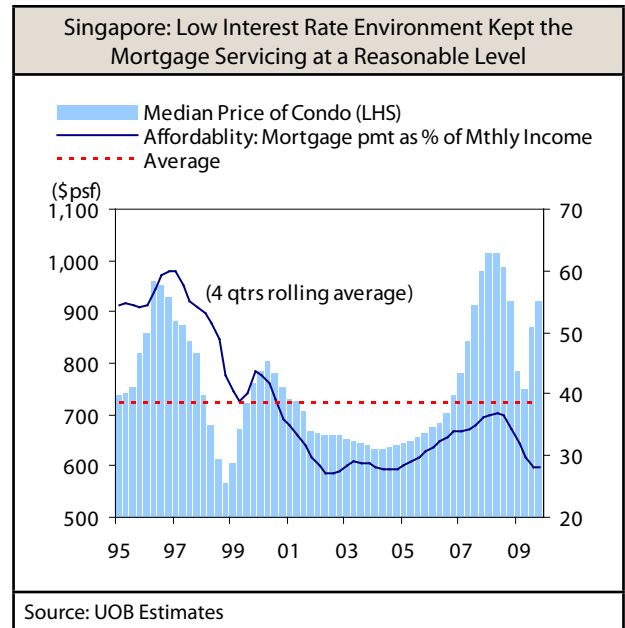
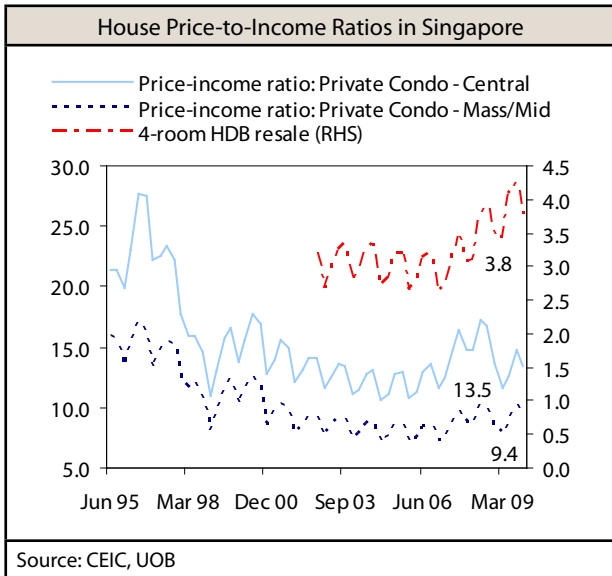
We estimate that the house price-to-income ratio for Singapore's mass market private condo (average 4Q09 transacted price for ex-central regions) is around 6.9, based on the median resident household income for private residences. However, the ratio is as high as 14.9 for recently launched condos in the central region. Aside from concerns that it is difficult to prevent more spillover of the high real estate prices into the suburban areas, marginal buyers for these properties might be hit as interest rates start to rise.

The Key Risk is the Interest Rate Environment, An Issue Which We Have to Contemplate With in 2011.

For now, the low interest rate environment has helped to keep the mortgage servicing ratio for mass market properties at 31% of monthly income at end-2009 (although it could be as high as 57% for marginal buyers of central region condos). We are assuming 25 years monthly mortgage repayment and LTV of around 70%. Our sensitivity analysis showed that the mortgage servicing ratio for mass market properties could rise to around 42.6% if domestic interest rates increase by 300bps, keeping income and house price constant. This is close to early-2000 levels but is still well-below the 60% high in 1996. The assumption of constant income and house price also meant that we could see further upward pressure on the debt servicing if the house price increase outpaces income growth in the short term. Particularly for the mass market properties, we see the pressure on affordability driving down the apartment sizes as the price per square foot (psf) moved upwards.

Watch for Policy Risks

Despite concerns that an asset bubble may be developing, house price-to-income ratios as well as mortgage payment ratios in the region are mostly still within manageable ranges, which probably explain why the governments have not been too aggressive. So far, policy measures have been cautious to avoid stalling the recovery momentum in the respective economies. Barring a sharp pull-back in global liquidity, the biggest risk appears to come from government policies for now, as policymakers are clearly keeping a close watch on the prices and as central banks begin to unwind their loose monetary policies. This would see interest rates normalising beginning sometime in 2H10 and the pace could quicken into 2011 as global economies are expected to improve. Further unabated increase in real estate prices will likely warrant more administrative measures to dampen activities. These together with expectation of higher interest rates will still have some deterrent effect against a sharper increase in prices from here although our study shows that house prices will find support from current manageable affordability ratios and capital inflows.



Sensitivity Analysis: Impact on Affordability from Interest Rate Increase					
	Dec 2009				Average 1996
		+100bps	+200bps	+300bps	
Singapore Private Condo Affordability	31.2%	34.7%	38.5%	42.6%	60.0%

Source: UOB

A Review of the Measures Supports View that there is Concern that an Asset Bubble may be Developing: Summary of Measures to Dampen Property Markets in Asia	
South Korea	
Jul 2009	Loan-To-Value ratios tightened to 50% in Seoul and metropolitan area.
Aug 2009	To accelerate public homes project and to provide 1.5mn homes for the next 10 years.
Sep 2009	Debt-to-income ratio regulation expanded to the Seoul metropolitan area (previously only Gangnam) for mortgage loans exceeding 50 million won, which requires that the total mortgage cannot exceed 50% of a borrower's annual income in Seoul and 60% of income in the Incheon and Gyeonggi Province.
Hong Kong	
Oct 2009	(1) Loan-to-value ratio for properties valued at more than HK\$20m lowered to 60% from 70%; (2) HKMC fixed tenure for mortgage rate increased to as long as 10 year fixed rate @ 3.8% for qualifying mortgages
Nov 2009	3 new policies governing developers' presale procedures aimed at improving the transparency of the primary property market.
Feb 2010	Budget 2010: Increase land for residential projects and raise the transaction tax on homes worth >HK\$20mn to 4.25% from 3.75%.
Mar 2010	Govt plans to sell around 4,000 of its subsidised apartments under the Home Ownership Scheme and will also put on sale 374 subsidised apartments under its Sandwich Class Housing Scheme (23% discount to mkt px for monthly household income < HK\$39,000).
Malaysia	
Oct 2009	The government has proposed in its Budget to tax gains from the disposal of real property at 5% from 1 January 2010. This will be limited to those sold within 5 years of purchase.
China	
Apr 2009	CBRC reiterated second-home mortgage policy: requirement of minimum 40% down payment and mortgage rate at >1.1x PBoC benchmark lending rate.
May 2009	News on trial implementation of property tax in Shenzhen which was subsequently written into city's next 3-yr plan.
Dec 2009	(1) Land costs to be paid up within one year of land grant; (2) downpayment on land sales \geq 50% of total land cost; (3) developers with land payment in arrears will not be allowed to participate in further land sales.
Jan 2010	Raise RRR by 50 bps to 16% for large banks and 14% for small banks from 18 Jan. In Guangzhou, enforce rule that developers pay a fee equal to 20% of land price on idle land, unless the delay is out of developers' control.
Feb 2010	Several measures in Beijing: (1) foreigners allowed to buy a residential property after staying in the city for at least one year; (2) monitor land sales, including land parcel must be <200,000 sqm, downpayment \geq 50%; (3) enhance transparency and info flow of the sector.
Apr 2010	For 1st home buyers, the downpayment > 30% if the purchased unit has GFA > 90sqm. As for 2nd home buyers, the downpayment \geq 50%, and the mortgage rate \geq 1.1 times the best lending rate. For buyers of 3rd home, banks may refuse mortgages. The central govt also impose responsibility on local and provincial govts to keep home prices affordable.
Singapore	
Sep 2009	(1) reinstating the Confirmed List for the 1H10 Government Land Sales Programme; (2) immediate removal of the Interest Absorption Scheme (IAS) and Interest-Only Housing loans; (3) Budget 2009 Budget assistance measures for the property market will not be extended
Feb 2010	(1) 3% sellers' stamp duty on property sold within a year; (2) lower loan-to-value ratio to 80% from 90%.
Mar 2010	HDB resale flats' holding period extended to 3 years from 1 year. Limits on the number of public flats in each block and neighbourhood that can be sold to PRs and citizen-PR couple will have to pay a \$10,000 premium for new flats launched by the HDB.
Source: Various Newswires	

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