## The Relationship between Consumption, Income and Wealth in Hong Kong

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## **Summary**

The aim of this paper is two-fold. First, to try to estimate a consumption function for Hong Kong along the lines of the standard Life-Cycle Model formulated by Ando and Modigliani (1963). Second, to use the estimated relationship to quantify the effect on consumption from the sharp fall in property prices since 1997.

Estimating a consumption function for Hong Kong is not a straightforward exercise given the lack of official quarterly estimates of household sector income and wealth. The paper reports the results of empirical tests between alternative proxies for aggregate labour income which are derived from estimates of average pay and employment, and employs a new series developed by the Hong Kong Monetary Authority for private sector housing wealth. We find a stable relationship between consumption, labour income and wealth in Hong Kong with plausible long run estimates of the implied marginal propensity to consume out of income and wealth.

In particular, the implied marginal propensity to consume out of housing wealth is estimated to be 0.03, which is lower than previous estimates for Hong Kong and estimates for other industrialised economies. It is argued that this is consistent with an uneven distribution of housing wealth in Hong Kong, skewed towards rich households. The owner-occupation rate in Hong Kong is under 50% which is low compared with other industrialised economies, reflecting the importance of the private and public rented sector.

Nevertheless, a 10% increase in house prices is estimated to raise aggregate consumption by around 1% in Hong Kong, similar to the estimates for the US, UK and Canada, reflecting the overall size of housing assets relative to consumption. Based on this estimate, the 52% drop in housing wealth since 1997 would, if sustained, reduce consumption by HKD 66 billion, or just under 9% of annual 2001 consumption. The actual fall in consumption between 1997 and 2001 was 7.6% so the decline in housing wealth can, arithmetically, more than account for the weakness of consumption since then.

For financial wealth, the implied marginal propensity to consume for Hong Kong is estimated to be between 0.02 and 0.04, similar to estimates for the US, UK and Canada. This is partly calibrated due to data limitations, and is consistent with survey information suggesting that the level of share ownership among households in Hong Kong is comparable to that in the US, UK and Canada but higher than in European countries.

The implied long run marginal to propensity to consume out of labour income is 0.87, broadly in line with estimates for other industrial countries, e.g. the UK. There is some evidence that this has fallen in the second half of the sample period, possibly reflecting increased volatility in the macro economy following a sequence of negative shocks (the decline in asset prices in 1993-94; the Asian Financial Crisis in 1997-98; and the global recession post-2000).