A Robust Textual Analysis of the Dynamics of Hong Kong Property Market

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Summary

This paper studies the extent to which macroeconomic shocks in Hong Kong transmit to the housing market through the sentiments channel. Although the notion of market sentiments is not new, and many have argued that market sentiments are a key driver of asset prices, including property prices, market sentiments are hard to measure and there have been few systematic studies on whether and how sentiments may drive the fluctuations in property market variables.

Riding on the recent advancements in big-data analytics and natural language processing techniques, this paper proxies property market sentiments using a lexicon approach. In particular, we construct a news-based property market sentiment index for Hong Kong based on local newspaper articles. Further, we use internet search intensity of housing market-related information on the Google search engine to reflect buyers' incentives. Using these novel measures of property market sentiments, we study their relationships with property prices and transaction volumes.

There are several interesting findings in this paper. First, the news-based property market sentiment index can reflect changes in sentiments during major economic and market-specific events. On further distinguishing the market sentiments in the primary and secondary market, we find that the primary market sentiments tend to lead the secondary market sentiments during the period of low housing supply. Second, the buyers' incentives index based on Google search results is found to improve the forecasting (or nowcasting) of the official Rating and Valuation Department housing price index. Third, we show that, in line with existing theories, both market sentiments and buyers' incentives could be driven by the macro environment. An improvement in market sentiments could stimulate buyers' incentives, which then together would affect housing prices and transaction volumes through the sentiment channel.