Rental Adjustment and Housing Prices: Evidence from Hong Kong's Residential Property Market

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Summary

This paper investigates the interaction between housing prices and housing rentals. The finance paradigm suggests that the fundamental value of a housing unit is its present value of future rental income, just as stock prices can be considered as the present value of future dividends. However, an important difference between the stock market and the rental market is that if, for whatever reason, the stock price becomes too high to be justified by future dividends, the only action stockholders can take is to sell the stocks; there is no mechanism for stockholders to demand higher dividends. However, when housing prices become too high, house owners can either sell their asset or demand a higher rent, owing to the fact that increases in housing supply take time. One implication is that sharp increases in housing prices can feed directly through to higher rents.

This paper proposes an empirical model for changes in rental prices. Landlords are investors seeking to optimize their investment portfolio and, in the long run, risk-adjusted rental yields will tend to converge to the average capital return in the economy in the long run. During housing price booms (busts), higher (lower) housing price causes rental yields to deviate from equilibrium whole economy capital returns. The gap between these two – the return gap - is the driving force for the rental adjustment. The intuition behind this mechanism is straightforward. During housing price booms, higher housing prices lead to a lower rental yield, other things equal. Landlords have two options: sell their housing assets and use the money to invest in other assets to get the average capital return, or request a higher rent. Through this mechanism, price changes in the housing market can directly affect rents.

We test our theoretical hypothesis by investigating whether the return gap plays a role in explaining changes in rents using data from the Hong Kong residential property market. Our empirical results support the conventional rental adjustment theory: that the gap between the natural and actual vacancy rate is significant in explaining changes in rents. Additionally, our results provide support for the argument that changes in housing prices affect rents directly. The gap between rental yields and equilibrium whole economy capital returns is also significant in our empirical model. Its sign is positive and suggests that a 1% change in the return gap leads to a 0.30% change in real rents. If housing prices directly affect rents, then one important policy implication is that variations in the price-to-rent ratio – which is often used as a measure of the divergence of housing prices from their fundamental level – may underestimate the size of any housing price disequilibrium.