

## **Influence Analysis of Macroeconomic Parameters on Real Estate Price Variation in Taipei, Taiwan**

**Authors :** Li Li, Kai-Hsuan Chu

**Abstract :** It is well known that the real estate price depends on a lot of factors. Each house current value is dependent on the location, room number, transportation, living convenience, year and surrounding environments. Although, there are different experienced models for housing agent to estimate the price, it is a case by case study without overall dynamic variation investigation. However, many economic parameters may more or less influence the real estate price variation. Here, the influences of most macroeconomic parameters on real estate price are investigated individually based on least-square scheme and grey correlation strategy. Then those parameters are classified into leading indices, simultaneous indices and laggard indices. In addition, the leading time period is evaluated based on least square method. The important leading and simultaneous indices can be used to establish an artificial intelligent neural network model for real estate price variation prediction. The real estate price variation of Taipei, Taiwan during 2005 ~ 2017 are chosen for this research data analysis and validation. The results show that the proposed method has reasonable prediction function for real estate business reference.

**Keywords :** real estate price, least-square, grey correlation, macroeconomics

**Conference Title :** ICEMM 2018 : International Conference on Economics and Marketing Management

**Conference Location :** Tokyo, Japan

**Conference Dates :** November 12-13, 2018