Analysis on Different Market Data for Real Estate Valuation – Investigations on German Real Estate Market

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Key words: Land management; Valuation

SUMMARY

In Germany, real estate valuation is used for different purposes like lending of real estates and tax purposes (inheritance tax). A legally reliable and reliance valuation in areas and markets with only few transactions is causing problems due to the few available market data. Hence, the reliable statistical analysis and derivation of data for valuation practice fail for short evaluation periods. The necessity of a reliable valuation, even in housing market can be seen in former financial market crisis.

In this paper alternative market data sources are discussed. The focus lies on the knowledge of real estate experts, offer prices and site characteristics. To get to know something about the knowledge of real estate experts, 10 experts (local estate agents, construction engineers and official appraisers) were interviewed. First analysis on this data is presented to combine them in a next step. For this purpose, dependencies among these data sources are investigated. A relationship among purchase prices and offer prices considering the offering time and prices offset is shown. Mean price offset of -13% (purchase-offer) is detected and a huge range between maximum (+20%) and minimum offset (-80%) can be found. A regression analysis on both datasets confirm that the experts' knowledge fit well to the purchase price data. In addition, the accuracy estimated by experts on their evaluation is investigated. Typical behavior, known from social science can be detected in experts' choice. The accuracy of the different available data is considered to find a way to give proper weights for these data sources in an aggregation. With such an aggregation, better results could be achieved especially in markets with few transactions or short evaluation periods. Future work will have a look on larger datasets in different regions and derive detailed relationships models.

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FIG Working Week 2016 Recovery from Disaster Christchurch, New Zealand, May 2–6, 2016