

Digital Processes in Real Estate Appraisal – Opportunities for Efficiency and Objectivity

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SUMMARY

In addition to the creative process of appraiser, i.e. the valuation itself, real estate valuation also requires cumbersome and time-consuming tasks, whose manual processing is often perceived as a nuisance. Digitization offers new opportunities for real estate experts, which, on the one hand, allow more efficient working methods by streamlining the process and, on the other hand, can represent a more reliable and objective basis for the evaluation.

In particular, the weak information efficiency of the real estate market can be countered by digital tools that enable the use of big data analyses, for example.

As an essential element of the valuation process for investment properties, the discount rate is a critical variable, whose determination poses great challenges for the experts. A digital approach with the help of big data can show new ways of determining the value, i.e., the discount rate, and provide a remedy for the appraiser.

As with share prices, a parallel development can be observed on the individual real estate sub-markets, e.g. the residential real estate market. This observation is due to so-called market influencing factors such as the key interest rate, which permanently determine the development and trends of a market and are therefore referred to as determinants - they determine supply and demand. Accordingly, the influencing factors are to be understood as the cause of the market developments in the various sub-markets and are therefore able to explain the level of the discount rate, i.e. the return on the investment as interest on the capital employed. These market factors include in particular macroeconomic as well as overall economic and socio-demographic factors.

As part of a regression analysis, a linear equation, the so-called factor model, was developed to

determine the discount rate based on these influencing factors. The discount rate for the valuation of a property can thereby be determined in a comprehensible way based on facts.

This makes it possible for the first time to quantify the connection between the real estate market and the general economic situation at a location and to use it to improve data quality on the real estate market.

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