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ANALYSING BANK REAL ESTATE PORTFOLIO MANAGEMENT BY USING IMPULSE RESPONSE FUNCTION, MAHALANOBIS DISTANCE AND FINANCIAL TURBULENCE

Abstract:

During the financial crisis that had its peak a few years ago, one of the interesting questions was raised. Does there exist a possibility that the aforementioned crisis will repeat. As real estate management took one of the key roles in the post-crisis period, it was expected that the lessons that crisis brought with itself, were learnt. Despite lagging effect that the aforementioned turbulence had on Western Europe, real estate prices kept raising and exhibited accelerating growth. This paper will try to address the aforementioned problem by analysing real estate portfolio management by using impulse response function. In order to analyse banking portfolio management, it was assumed that state of the art methods are used. Portfolio management is modelled by using Mahalanobis distance and financial turbulence index was analysed. As financial turbulence index was calculated for the total real estate share prices by taking the data from St. Louis FED database, interesting results were obtained. It was proved that real estate prices kept rising in Germany, Austria and Switzerland despite the warning foreshadowed by the financial crisis. Financial turbulence analysis pointed out that the volatility of real estate prices in the aforementioned countries was highest in the mid-2011 and it still has a high value. This indicates that real estate price bubble is a real threat to the whole financial system of Western Europe.

Keywords:

Mahalanobis distance, real estate, portfolio management, financial turbulence, impulse response function, Germany, Switzerland, Austria

JEL Classification: G00, G01, F00