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## WAVELET ANALYSIS OF MONEY, CREDIT AND HOUSE PRICES -FINDINGS OF THE RESEARCH PROJECT NUMBER 2017/26/D/HS4/00116 FUNDED BY THE NATIONAL SCIENCE CENTRE, POLAND

## Abstract:

The goal of the paper is to provide new knowledge on the linkages between money, credit and house prices. The analysis is carried out for twelve industrialized countries from 1970 to 2016. I employ the modern continuous wavelet analysis. The method allows analyzing the dynamic association between money growth, credit growth and house prices at the frequency level (i.e. from the short run relations, through the typical business cycle frequencies to the long run developments). I show that the association between money/credit and house prices is largest when house prices are booming and in the longer run. Additionally, the co-movements between money/credit and house prices varied across countries during quantitative easing which has brought relevant consequences for the diversified macroeconomic performance. In the paper, I present a new wavelet argument for a separate monetary pillar of the European Central Bank. Wavelets confirm, however, that 'leaning against the wind' may be problematic due to the changeable impact of money/credit on house prices between countries and for different time horizons. Wavelets show that the relationship between money, credit and stock prices rise when house prices are booming in the longer run, whereas the relationship is rarely significant in the short run. The results shed new light on the relevance of monitoring joint co-movements of money, credit, house prices and stock prices since they bring relevant implications for the successful monetary policy.

## **Keywords:**

Money and credit, House prices, Wavelets

JEL Classification: C22, E32, E50