## **DESCRIPTION FOR THE GENERAL PUBLIC**

## Money, Credit and House Prices from the Wavelet Perspective

Housing related recessions associated with the global financial crisis have awaken the renewed interest in the linkages between housing and the macroeconomic variables. In particular, the central banks' unconventional measures have led economists to question whether global liquidity matters for housing and other asset prices and whether it sows the seeds for the future subprime crisis.

The goal of the project is to provide new insights into the link between the growths of money, credit and house prices for the industrialized countries since the 1970s through the lens of the modern continuous wavelet analysis. Wavelet analysis allows to analyze the relationship between money growth, credit growth and house prices at the frequency level (i.e. taking into account the whole spectrum of frequencies: from the short run relations, through the typical business cycle frequencies to low frequencies represented by the long run developments) and at the same time to assess the changes in the relationship across time. The goal of the project is to answer the questions concerning the significance of the link between money growth, credit growth and asset prices, the prevailing direction of the link, the relative importance of money growth or credit growths) and changes of the relations across time and frequency and in consequence, the answer whether quantitative easing pose a threat of inflating house prices through the rise of monetary or credit aggregates from the wavelet perspective.

The Great Recession was followed by the weak recovery, which in turn may be traced back to the negative housing shocks. In response to the financial crisis, unconventional monetary policy tools have been implemented by major central banks, which usually have led to a great expansion of their balance sheets. The analysis of joint links between money growth, credit growth and house prices is important as they have been found to have significant impact on economic activity and aggregate price inflation, especially during periods of booming asset prices. Moreover, asset price fluctuations may determine credit conditions and potentially become a mechanism that would propagate a macroeconomic shock and consumer price inflation, especially if there exists selfreinforcing effects between house prices and credit.

The wavelet comparison of industrialized countries may capture the important differences in the transmission of monetary and credit shocks. The analysis my help to understand to what extent, credit growth and money growth contribute to asset booms and bursts. It may also shed new light on possible inflationary consequences of quantitative easing and whether monetary policy should be adjusted to large swings in house prices and whether taking into account the joint links between money, credit and mortgage prices could be of some help. Moreover, the (in)significance of the link between money balances and the macroeconomy and the house or other asset prices, may provide evidence for or against the two-pillar ECB's monetary policy strategy.