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SIX QUESTIONS TO KONSTANTIN KHOLODILIN

»A new early warning system can forecast housing bubbles«

1. Dr. Kholodilin, speculative bubbles on stock and real estate markets can lead to serious losses of production and employment. DIW Berlin has now developed an early warning system for speculative price bubbles within real estate markets. How can a price bubble be identified at all?
   Our technique consists of two parts. Since there is no chronology of bubbles, we have to identify them first. That is the first part of our technique. We have identified the bubbles, that is, the periods when bubbles occur and when they end, using different econometric methods. The second part is to forecast the identified bubbles as precisely as possible. For this, we use a number of different macroeconomic and financial indicators, such as the rent-to-house price ratio, short-term interest rates or money supply. These indicators are especially important for forecasting housing bubbles.

2. Who should apply this early warning system and how does it work?
   The project is funded by the Federal Ministry of Finance, which is also the first user of our system. The model we developed computes the probability of housing bubbles to occur based on the current data. This probability signals whether a bubble is in sight or not.

3. How reliable is such an early warning system?
   We tested the system using historical data. Our data set includes data of twelve industrial countries and covers more than 40 years. Within this period, there occurred 16 bubbles in these countries. As our study shows, we were able to identify all of these 16 bubbles and produced two false alarms. The system is thus able to forecast housing bubbles quite reliably.

4. At what point should authorities intervene?
   First of all, we have to be sure that it is not a false alarm. A false alarm could trigger a panic, which, in turn, could lead to a crisis. The probability of a price bubble should be relatively high, say above 50 percent, and it should last for at least two quarters. Only then, we can be sure that it is in fact a bubble. Since housing bubbles usually last between one and four and a half years, there is enough time to react.

5. Which measures should be taken in this case?
   I would prefer institutional measures. For example, the conditions for granting loans could be tightened in order to prevent the banks from granting households too many loans, as it has happened in the USA. Possibly, the transaction costs for buying property, such as taxes or various fees, could be raised as well. These instruments enable us to react in a more focused way to the events happening at the housing market. If we start raising interest rates in order to avoid housing bubbles, this could affect the whole economic dynamics in a negative way.

6. Is Germany currently facing the risk of a housing bubble?
   I don't see that. Some bigger cities, such as Hamburg and Berlin, currently have rising prices, but this is not a bubble, since housing prices – like all other prices – just rise from time to time. It has more to do with relatively strong economic growth in the current and past year. But there is currently no decoupling of the housing prices in Germany from overall economic development.