Systemic risk from real estate and macro-prudential regulation

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Abstract: There is considerable evidence that boom and bust cycles in real estate are the primary cause of financial crises. This paper develops a model of real estate pricing based on rational behaviour with two regimes. In 'normal times' prices of housing units are determined by the consumers who live in them and are equal to the discounted stream of housing services. In 'boom and bust times' speculators find it profitable to borrow from banks and enter the market. There is an agency problem because banks are unable to fully assess the risk that the speculators are taking and this leads to risk shifting and asset substitution. The result is a bubble in real estate prices in that they are higher than the discounted stream of housing services during the boom phase. This model is then used as the basis for analysing macro-prudential polices designed to prevent the occurrence of such bubbles. These measures include monetary policy, fiscal tools such as real estate transfer taxes, and annual real estate taxes and banking regulation such as restrictions on loan-to-value ratios, countercyclical capital requirements and loan provisions.

Keywords: boom-bust cycles; agency problem; price bubbles; loan restrictions; taxes.

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