

# Bank Capital, Housing and Credit Constraints <sup>1</sup>

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This paper integrates household financing frictions with bank financing frictions and housing price fluctuations in a dynamic stochastic general equilibrium model. To our knowledge this is the first macroeconomic model to study this link. We use a 2 sided costly default framework in which the bank cannot fully diversify shocks to its borrowers to study the link between household and bank sectors' financial distress levels. The cyclical behaviour of the cost of the bank-depositors financing friction is determined by two main factors. On one hand, booms improve the financial health of the banks' borrowers which tends to reduce the cost of bank funding. On the other hand, consumption smoothing by savers and borrowers during booms increases the proportion of external financing in the banks' balance sheet which tends to increase the cost of bank funds. As a result of these opposing effects, the model matches procyclical profits and countercyclical leverage in the financial sector, as observed in the data, but the banking frictions in the model have an insignificant impact on the main macroeconomic aggregates such as output, consumption and investment. The other

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