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Capital requirements, risk shifting and the mortgage market

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The results suggest that a rise in an affected banks capital requirement of 100 basis points, conditional on all observable borrower, loan and balance sheet characteristics, leads to a decline in loan size of about 5.4%. We also find evidence for risk shifting: there is no contraction in loan size for borrowers with an impaired credit history or first-time buyers, while borrowers with verified income are affected to a greater extent. In contrast, the size of mortgage loans issued by locally competing lenders rises by an almost identical amount. This suggests that adjustment to higher capital requirements is mostly through the extensive margin and is also consistent with loan substitution in response to changes in their competitors' capital requirements. But we do not find similar evidence for credit substitution of non-bank finance companies.

While the findings from this study are based on changes to individual banks' microprudential capital requirements, they may still offer important lessons for our understanding of how macroprudential policy might affect loan supply. Our results suggest that increases in capital requirements intended to make a bank more resilient may also raise the riskiness of a bank's balance sheet by inducing risk shifting behaviour. Our results also show that competition in the local lending market may mute the loan contraction when higher capital requirements are imposed only a subset of lenders. Changes to regulation introduced after the end of our sample period may, however, mean that our results might be less applicable to macroprudential capital requirements. Banks' use of internal models for setting risk weights on mortgages, introduced under Basel II, may prevent risk shifting, so long as the weights are sufficiently risk-sensitive. The reciprocity clauses in the countercyclical capital buffer, introduced under Basel III, should help to stop foreign branches from substituting for domestic lenders when a national authority increases the buffer rate.[7] But the general principle, documented here, that the financial system may adapt to new regulations in ways that may lead to unintended consequences will also be applicable to Basel III.

[7] Clearly UK capital requirement regulation can only affect UK-regulated banks. In theory, foreign branches, which are not subject to UK capital regulation, could provide a source of credit substitution in response to UK macroprudential capital requirement changes. But in practice the reciprocity clause in Basel III would require the regulator in the foreign branches' home country to match this capital requirement rise on UK lending. This should address loan substitution of foreign banks.

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