Available online at www.sciencedirect.com
ScienceDirect
Journal of Macroeconomics 30 (2008) 69–96
Journal of MACROECONOMICS
www.elsevier.com/locate/jmacro

The credit channel of monetary policy: Evidence from the housing market

Matteo Iacoviello [a,*], Raoul Minetti [b]

[a] Boston College, Economics, 140 Commonwealth Ave, Chestnut Hill, MA 02467, United States
[b] Michigan State University, 110 Marshall Hall, East Lansing, MI 48824-1038, United States

Received 13 January 2006; accepted 5 December 2006
Available online 7 March 2007

Abstract

This paper tests a credit channel of monetary policy (especially a bank-lending channel) in the housing market. We argue that the relevance of the credit channel depends on the structural features of the housing finance system, in particular efficiency and institutional organisation. We employ a VAR approach to analyse this issue in four housing markets (Finland, Germany, Norway and the UK). Our findings show across countries a clear-cut relationship between presence of the credit channel, efficiency of housing finance and type of institutions active in mortgage provision.

JEL classification: E44; E51; E52; G21; C22

Keywords: Monetary transmission; Bank-lending channel; Housing market; Vector autoregressions

1. Introduction

Since Bernanke and Blinder (1988), the literature has shown a renewed interest in the credit channel of monetary policy. According to this view, widespread imperfections in the credit market, such as asymmetric information or imperfect contract enforceability, result for consumers and firms in a wedge between the opportunity cost of internal funds and the cost of external funds. In turn, this *external finance premium* depends on monetary

* Corresponding author. Tel.: +1 617884467.
E-mail address: iacoviel@bc.edu (M. Iacoviello).

0164-0704/$ - see front matter
doi:10.1016/j.jmacro.2006.12.001

policy. Tight monetary policy not only raises market rates of interest but also the external finance premium, thus discouraging investment and consumption. The explanations of this link are twofold. The *balance-sheet* view argues that the bridge between monetary policy and the external finance premium is represented by the financial position of borrowers. Tight money affects borrowers' net worth, either reducing their current cash flows (increasing interest on debt burdens) or the value of their pledgeable assets. This feeds back on the external finance premium required by external lenders. The *bank-lending channel* view, on the other hand, focuses on lenders' financial status. Tight money drains reserves and retail deposits on the liability side of banks' balance-sheets. Faced with this deposit drain, banks can react by increasing their funding through managed liabilities (such as certificates of deposit) or shrinking assets (loans and securities). In the presence of an upward sloping supply for managed liabilities, banks may find too costly to fully offset the reduction in retail deposits and opt to reduce their assets. The lending view argues that the impact is relatively stronger on loans than on securities. In fact loans and securities are imperfect substitutes because loans are riskier and less liquid. Therefore tight money causes an inward shift of credit supply that especially affects borrowers with limited access to non-bank sources of external funding.

The credit channel literature has produced mixed results (see Bernanke and Gertler, 1995; Baum et al., 2003). A strong focus has been placed on identifying contractions in credit aggregates resulting from inward shifts in the demand for funds (fully consistent with the traditional monetary transmission mechanism) from shifts in supply resulting from a credit channel. A second crucial issue of this empirical literature has been to disentangle the bank-lending from the balance-sheet channel (Kashyap et al., 1993). In this sense, much work has been done on the relative impact of monetary policy on firms with different dependence on bank funds, such as small and big firms (see Gertler and Gilchrist, 1994).[1]

This paper analyses the credit channel of monetary transmission on the households' demand side focusing on the housing market. Our aim is twofold. One the one hand, we want to assess the presence of such a channel in the housing market, possibly disentangling a bank-lending from a balance-sheet channel. On the other hand, we want to relate its presence to the structural characteristics of the housing finance system, especially its institutional organisation and its efficiency. Clearly, the paper has implications that go beyond the housing market. Housing plays an important role in the business cycle, not only because housing investment is a very volatile component of demand (Bernanke and Gertler, 1995), but also because changes in house prices can have important wealth effects on consumption (International Monetary Fund, 2000) and investment (Topel and Rosen, 1988).

There are three main motivations for our paper. First, housing markets feature puzzles in terms of quantity and price dynamics hard to reconcile with the traditional monetary

[1] Other studies use microeconomic data and exploit cross-sectional differences among banks or firms to disentangle a bank-lending channel. Using data from the Call Reports submitted by insured banks to the Federal Reserve, Kashyap and Stein (2000) find that small and illiquid banks react more strongly to monetary shocks, concluding that these banks cannot protect their loan portfolios by shrinking their stock of securities. Baum et al. (2003) show that the results of Kashyap and Stein (2000) can be explained by a different behaviour of banks in the presence of financial sector uncertainty rather than by a bank-lending channel. Ashcraft (2006) argues that the result that small banks react to monetary shocks more strongly than big ones could be driven by the fact that large banks fund mainly large firms. In general, a shortcoming of these studies using microeconomic data is that they do not ascertain whether the bank-lending channel affects aggregate economic activity.