

International Review of Economics and Finance 13 (2004) 363-369



www.elsevier.com/locate/econbase

## Monetary policy and the credit channel in an open economy

### Carlos D. Ramírez\*

Department of Economics, George Mason University, Fairfax, VA 22030-4444, USA

Received 22 May 2001; received in revised form 1 April 2003; accepted 23 April 2003 Available online 25 July 2003

#### Abstract

This paper extends Bernanke and Blinder's [Am. Econ. Rev. 78 (1988) 435] "credit-channel" model to the open economy. In particular, it examines whether the monetary policy results predicted by the popular textbook Mundell–Fleming model [e.g., Can. J. Econ. Polit. Sci. 29 (1963) 475; IMF Staff Pap. 9 (1962) 369] change with the open-economy version of the Bernanke and Blinder credit-channel model. This examination is important to consider in light of the popularity of the Mundell–Fleming model at the policymaking level and in light of recent empirical findings giving strong support to the credit channel as a monetary policy transmission mechanism. The main conclusion is that monetary policy is much more potent under the open-economy version of the Bernanke and Blinder model than under the standard Mundell–Fleming model.

© 2003 Published by Elsevier Inc.

JEL classification: E51; F41 Keywords: Credit-channel model; Mundell-Fleming model; Monetary policy; Interest rates

#### 1. Introduction

It is well known that, at least in the short run, monetary policy affects real economic activity. The monetary economics literature highlights two mechanisms through which this happens—the "money channel" and the "credit channel." The standard textbook money channel emphasizes that, through open-market operations, central banks can directly affect real interest rates (in the short run), thus the

<sup>\*</sup> Tel.: +1-703-993-1145; fax: +1-703-993-1133.

E-mail address: cramire2@gmu.edu (C.D. Ramírez).

<sup>1059-0560/\$ -</sup> see front matter @ 2003 Published by Elsevier Inc. doi:10.1016/S1059-0560(03)00038-8

cost of capital. The credit channel emphasizes that open-market operations also directly affect banks' loan supply schedules. Thus, the central bank not only affects the interest rates of government securities, but also the effective spread between bank loan rates and the rate of government securities.<sup>1</sup>

One of the more celebrated theoretical papers that emphasizes the credit-channel view is that of Bernanke and Blinder (1988) (henceforth referred to as BB). They extend the standard IS–LM model by explicitly modeling the loan market independently from the money market. By separating the loan and money markets, they are able to show that an increase in the money supply increases output not only through the standard money market, but through the loan market as well. As a result, their model predicts that expansionary monetary policy has a more potent effect on output than that which the standard IS–LM model predicts, without necessarily affecting the level of interest rates.

The purpose of this paper is to extend BB's model to the open economy. In particular, I examine whether the monetary policy results predicted by the popular textbook Mundell–Fleming model (e.g., Fleming, 1962; Mundell, 1963) (henceforth referred to as MF) change with the open-economy version of the BB model. This examination is important to consider in light of the popularity of the MF model at the policymaking level and in light of recent empirical findings giving strong support to the credit channel as a monetary policy transmission mechanism.

The main conclusion is that monetary policy is unambiguously more potent under the openeconomy version of the BB model than under the standard MF model. This result comes about because of two reasons. First, just as in the BB model, separating the loan from the bond market makes aggregate investment much more directly responsive to changes in the money supply. Second, the credit channel makes the balance of payments more sensitive to interest rate fluctuations. This last result depends on the share of foreign bonds that the domestic banking sector invests in as part of its portfolio.

The approach taken here to model the open-economy version of the BB model is inspired by Freixas and Rochet's (1997) version of the standard IS–LM model. I use their version for the sake of simplicity and clarity.

This is not the first paper that has investigated this issue. In a recent article, Wu (1999) examines the role of monetary policy under a fixed-exchange regime with an operative credit channel. His main conclusion is that monetary policy can be effective in stimulating output even under a fixed exchange rate regime. His results, however, hinge on the critical assumption that the amount of foreign exchange reserves is kept constant in the model. This assumption is incorrect because the quantity of foreign exchange reserves becomes endogenous under a fixed exchange rate regime. Ramirez (2001) shows that when this assumption is relaxed, the ineffectiveness of monetary policy in stimulating output under a fixed exchange rate regime is restored, even though the credit channel is operative in the model.

<sup>&</sup>lt;sup>1</sup> There is a large empirical literature (in fact, too large to list here), which suggests that the credit channel is an important mechanism through which monetary policy affects output. Example of papers that not only provide evidence, but also survey some of the empirical literature, are Bernanke and Blinder (1992), Bernanke and Getler (1995), and Kashyap and Stein (1994, 1997), to name just a few.

# دريافت فورى 🛶 متن كامل مقاله

- امکان دانلود نسخه تمام متن مقالات انگلیسی
  امکان دانلود نسخه ترجمه شده مقالات
  پذیرش سفارش ترجمه تخصصی
  امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  امکان دانلود رایگان ۲ صفحه اول هر مقاله
  امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
  دانلود فوری مقاله پس از پرداخت آنلاین
  پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات
- ISIArticles مرجع مقالات تخصصی ایران