Liability dollarization and the bank balance sheet channel☆

Woon Gyu Choi a,1, David Cook b,*

a IMF Institute, International Monetary Fund, 700 19th Street, N.W., Washington, DC, USA
b Department of Economics, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong SAR, Hong Kong

Received 13 May 2002; received in revised form 21 July 2003; accepted 21 August 2003

Abstract

Emerging markets’ financial institutions often face a mismatch in the currency denominations of their liabilities (foreign currency-denominated debt raised from foreign lenders) and their assets (domestic currency loans to domestic borrowers). We study the effect of this mismatch on monetary policy in a sticky-price, dynamic general-equilibrium small open economy model in which the country default-risk premium depends on domestic banks’ balance sheets due to asymmetric information. A fixed exchange rate rule that stabilizes bank balance sheets offers greater stability than does an interest rate rule that targets inflation to offset the real effects of sticky-prices. © 2003 Elsevier B.V. All rights reserved.

Keywords: Bank balance sheet channel; Foreign currency debt; Sticky-prices; Exchange rate depreciation

JEL classification: F3; F4

1. Introduction

Emerging market economies often finance capital accumulation through international capital markets and, as a consequence, have large external debt positions denominated in foreign currency. In many countries, such as Korea and Thailand at the outset of the...
1997–1998 Asian financial crisis, a large share of international capital flow was intermediated by domestically owned financial institutions. Of the approximately 76 billion dollars recorded as raised by Thai firms on international debt markets between 1992 and mid-1997 (according to the IFR Platinum database), about 3.2% was denominated in Thai baht. More than 41% of the hard currency debt was loaned to banks or other firms in the financial sector. Less than 1% of the approximately 144 billion dollars recorded as raised by Korean firms during the same period was denominated in Korean won, and more than 62% of the hard currency debt was lent to firms in the financial sector, including finance companies and merchant banks. As noted by Eichengreen and Hausmann (1999), the vast majority of lending to emerging markets is denominated in foreign currencies. Calvo (2002) refers to the denomination of external debt in foreign currency as ‘liability dollarization’.

When banks borrow foreign currency to finance domestic currency loans, the resulting currency mismatch exposes their balance sheets to exchange rate fluctuations. In this paper, we examine some of the quantitative implications that such a mismatch may have for the conduct of monetary policy in emerging markets and for the dynamic propagation of macroeconomic shocks in an open economy. In particular, we examine a sticky-price, dynamic general-equilibrium (DGE) model of a small open economy in which capital flows are intermediated by banks whose cost of capital depends on the state of their balance sheets. An unexpected nominal exchange rate depreciation will negatively affect bank balance sheets, increase the country’s default-risk premium and potentially offset the standard expansionary effects of depreciation.

A key aspect of our model is that banks intermediate capital flows between a small open economy and global financial markets. The creditworthiness of a country’s banks determines the default-risk premium (i.e. the deviation of domestic interest rates from the exchange rate-adjusted world interest rate). An exchange rate depreciation that causes deterioration in bank balance sheets will increase the default-risk premium. However, a rise in the default-risk premium will also induce a temporary depreciation under floating exchange rates. There is thus a powerful feedback loop between bank balance sheets, the default-risk premium, and a floating nominal exchange rate. In equilibrium, foreign currency debt exposure can generate high volatility in the nominal exchange rate and in the real economy. The focus of this paper is a comparison of the business cycle stabilization properties of a monetary policy that fixes the exchange rate with those of a floating exchange rate policy represented by an inflation-targeting interest rate rule. In a model calibrated to match aspects of some East Asian economies, we find that fixed exchange rates provide greater macroeconomic stability.

Calvo and Reinhart (2000) show that currency devaluations lead to real contractions in emerging markets but not in developed economies. Among other factors, they attribute the real contractions to the deterioration of the balance sheets of firms with foreign currency debt. Krugman (2000) develops a stylized model in which a self-fulfilling devaluation leads to the deterioration of firms’ balance sheets and a decline in investment. However, in equilibrium, the effect of devaluation on the balance sheets of firms with foreign currency debt depends on the responses of the value of both assets and liabilities. The real effects of a monetary policy-induced devaluation on balance sheets depends on the existence and nature of nominal rigidities faced by the economy, as pointed out by Calvo (2000). If firms
دریافت فوری
متن کامل 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