



ELSEVIER

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

SCIENCE @ DIRECT®

Emerging Markets Review 4 (2003) 472–496

EMERGING  
MARKETS  
REVIEW

[www.elsevier.com/locate/econbase](http://www.elsevier.com/locate/econbase)

## Exchange rate volatility and economic performance in Peru: a firm level analysis<sup>☆</sup>

Luis J. Carranza<sup>a,b,\*</sup>, Juan M. Cayo<sup>a</sup>, José E. Galdón-Sánchez<sup>c</sup>

<sup>a</sup>Universidad San Martín de Porres, Escuela de Economía, Av. Las Calandrias s/n. Santa Anita, Lima, Peru

<sup>b</sup>Universidad de Navarra, Departamento de Economía, Campus Universitario, 31080 Pamplona, Spain

<sup>c</sup>Universidad Pública de Navarra, Departamento de Economía, Campus de Arrosadía, 31006 Pamplona, Spain

---

### Abstract

This paper analyzes the impact of the exchange rate volatility on the performance of the Peruvian economy using financial information from 163 non-financial listed firms. We find evidence that, for firms holding dollar-denominated debt, investment decisions are negatively affected by real exchange rate depreciation. The reasons behind this result are: (i) the high degree of liability dollarization and currency mismatch that create the conditions for a balance sheet effect and a financial stress in the aftermath of a currency depreciation; (ii) the strong bank-lending channel that follows and reinforces the balance sheet effect; (iii) the domestic demand shrinkage that affects severely firms' sales; and (iv) the relatively small and poorly diversified export sector.

© 2003 Elsevier B.V. All rights reserved.

*JEL classifications:* E22; F41; G31

*Keywords:* Balance sheet effect; Currency mismatch; Peruvian economy; Investment

---

### 1. Introduction

Which is the impact of exchange rate volatility on the economic activity? This seems to be one of the most compelling questions in the economic literature in

---

<sup>☆</sup> This paper is part of the IDB Research Project 'Debt Composition and Balance Sheet Effects of Exchange and Interest Rate Volatility: A Firm Level Analysis'. The usual disclaimers apply.

\*Corresponding author.

*E-mail address:* [lcarranza@usmp.edu.pe](mailto:lcarranza@usmp.edu.pe) (L.J. Carranza).

recent times. In the last decade, several countries experienced large exchange rate depreciations with different results. In some cases, such as Mexico in 1994 and Thailand in 1997, currency depreciations were followed by a large contraction in economic activity and the collapse of the financial sector. The most striking characteristics of these currency crises were that, previous to the crises themselves, the degree of exchange rate misalignment was considered small, and the macroeconomic fundamentals were considered sound in terms of low inflation, strong fiscal situation and prudent monetary stance, among other variables. On the contrary, in some other cases such as South Africa in 1998, after the currency depreciation economic conditions improved as output growth was restored.

What is driving these different results? Currency depreciation affects the real side of the economy through different channels. First, a real depreciation can have expansionary effects through increasing the operating profits in the export sector, as well as increasing the cost of the imported goods favoring tradable activities in the economy. The strength of this ‘competitiveness’ effect depends heavily on the price elasticity of the export sector as well as on the price elasticity of the imports. In particular, when a large fraction of imports are highly inelastic to changes in the relative price, as is the case with imported inputs and capital goods, the higher cost of inputs and capital goods could offset the positive effects in the export/tradable sector, having an overall contractionary effect in aggregate output as well as in investment. The evidence of the existence of this channel is mixed. On one side Ghei and Pritchett (1999) and Duttagupta and Spilimbergo (2000) provide evidence of how exports increase after a currency depreciation. On the other side Agénor and Montiel (1996) and Reif (2001) show the contractionary effects of a real exchange rate depreciation due to the cost-of-input mechanism.

A second main channel emerges when there exists a significant currency mismatch in the economy. A currency mismatch means that a large fraction of firm’s debt is dollar denominated while the flow of income as well as assets are mostly denominated in domestic currency. In such economy, a large real depreciation deteriorates the firm’s net worth. As the firm’s risk increases, credit becomes more expensive and more restricted, which finally affects investment and therefore, aggregate demand. As a result, through this ‘balance-sheet effect’, currency depreciations have contractionary effects in the economy.

To understand this channel, on the theoretical side, a large body of literature is being developed around what is known as the ‘open economy Bernanke–Gertler’ framework (a phrase coined by Krugman), which refers to the inclusion of some sort of imperfection in the domestic financial market within a standard model of open economy, along the lines of the Mundell–Fleming workhorse. Krugman (1999) and Aghion et al. (2001) present models that have as a common feature the existence of multiple equilibria. This feature is needed to explain the fact that most Asian countries experienced large currency depreciations without ex-ante significant changes in macroeconomic fundamentals.

Whether or not the competitiveness effect offsets the balance sheet effect is an empirical question that needs to be answered using firm-level data. So far, the evidence is not conclusive. Most notably, Bleakley and Cowan (2002), analyzing a

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ 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