Twin deficit or twin divergence? Fiscal policy, current account, and real exchange rate in the U.S.☆

Soyoung Kim a,⁎, Nouriel Roubini b,1

a 5-1 Sungbak-Ku, Anam-Dong, Seoul, 136-701, South Korea

b Department of Economics, KMC 7-83, Stern School of Business, New York University, 44 West 4th, Street, New York, NY 10012, United States

Received 31 January 2006; received in revised form 25 November 2006; accepted 30 May 2007

Abstract

In spite of concerns about “twin deficits” (fiscal and the current account deficits) for the United States economy, empirical evidence suggests that “twin divergence” is a more usual feature of the historical data, i.e., when fiscal accounts worsen, the current account improves and vice versa. This paper empirically studies the effects of fiscal policy (government budget deficit shocks) on the current account and the real exchange rate, during the flexible exchange rate regime period. Based on VAR (Vector Auto-Regression) models, we identified “exogenous” fiscal policy shocks after controlling for business cycle effects on fiscal balances. In contrast to the predictions of most theoretical models, the U.S. results suggest that an expansionary fiscal policy shock, or a government budget deficit shock, improve the current account and depreciate the real exchange rate. Increases in private savings and declines in investment contribute to the current account improvement while a nominal exchange rate depreciation, as opposed to a relative price level change, is mainly responsible for the real exchange rate depreciation. The “twin divergence” of fiscal balances and current account balances is also explained by the prevalence of output shocks, i.e. output shocks — more than fiscal shocks — appear to drive the co-movements of the current account and the fiscal balance.

© 2007 Elsevier B.V. All rights reserved.

Keywords: Real exchange rate; Current account; Government budget deficit; Fiscal policy; VAR

JEL classification: F32; F31; E62; F41; C32

1. Introduction

Questions concerning relationships between fiscal policy, the current account, and the real exchange rate are of great analytical and empirical interest. From the theoretical point of view, numerous models suggest that a fiscal expansion should lead to a worsening of the current account and an appreciation of the real exchange rate. The prime empirical

☆ We thank Michele Cavallo, Fabrizio Perri, Young Chul Park, Jonas Fisher, Harald Uhlig, Kwanho Shin, Woohoon Rhee, Young Seung Jung, Dong Eun Lee, Jae Won Yu, Giancarlo Corsetti, the Co-Editor of the journal, two anonymous referees, and seminar participants at the Econometric Society North American Meeting, Korea University, Yonsei University, the Bank of Korea, the Hong Kong Institute for Monetary Research, Lingnan University, and Kyunghee University for the comments and useful discussions. The usual disclaimer applies.

⁎ Corresponding author. Tel.: +82 2 3290 2223.

E-mail addresses: soyoungkim@korea.ac.kr (S. Kim), nroubini@stern.nyu.edu (N. Roubini).

1 Tel.: +1 212 998 0886; fax: +1 212 995 4218.

0022-1996/$ - see front matter © 2007 Elsevier B.V. All rights reserved.
doi:10.1016/j.jinteco.2007.05.012
example of such a relation is usually argued to be the experience of the United States with “twin deficits” in the first half of the 1980s and in the 2000s. As Figs. 1 and 2 show, a worsening of the fiscal balance (as a share of GDP) in the form of lower tax rates and higher military spending was associated with an appreciation (or a decrease) of the U.S. nominal and real exchange rates and a sharp worsening of the current account (as a share of GDP). In recent years, concerns about “twin deficits” have reemerged as a major worsening of the U.S. fiscal balance (a 6% of GDP turnaround between the large surplus of 2000 and the large deficit of 2004) was associated with a large and worsening current account balance (reaching about 5% of GDP in 2003 and further deteriorating afterwards).

The U.S. experience, however, cannot be reduced to the simple idea of repeated twin deficits and the positive relationship between the government budget balance and the real exchange rate. Most of the worsening of the fiscal deficit in the early 1980s may have been the result of the 1980–82 recession. Overall public savings started to improve from 1983 on while the current account worsened in the 1982–1986 period mainly because investment rates recovered after the slump of the 1980–82 recession. In addition, in the 1989–1991 period, the current account improved while the fiscal balance tended to worsen again. More importantly, between 1992 and 2000, the U.S. fiscal balance dramatically improved from a negative savings of 5% of GDP to a positive savings of 2.5% of GDP, but the current account worsened from −1% of GDP to −4.5% of GDP. Regarding the real exchange rate, the fiscal contraction and return to budget surpluses in the 1990s were associated with a real appreciation (or a decrease in the real exchange rate). Although the real dollar appreciation between 2000 and 2002 was observed in a period when budget deficits reemerged in a major way, the real exchange rate depreciated between 2002 and 2004 at a time when the budget deficit was further worsening.

These empirical facts are somewhat puzzling based on the theoretical predictions of a negative effect of fiscal expansion on the current account and the real exchange rate. General equilibrium endowment economy models of a small open economy with optimizing individuals and no capital account restrictions (Sachs, 1982, for a one-good model; and Frenkel and Razin, 1996, for both one and two-goods models), standard Keynesian models such as the Mundell–Fleming model and its rational expectations variants such as Dornbusch (1976), and calibrated international real business cycle models with investment such as Baxter, 1995; Kollmann, 1998, and Erceg, Guerrieri, and Gust (2005) tend to provide such predictions in most cases, although the precise effects depend on various factors such as the nature of the government budget deficit (e.g., government spending shocks or net tax shocks and the persistence of shocks), the characteristics of countries (e.g., large or small), the international asset market structure (e.g., complete

---

2 See Kim and Roubini (2006) for a more detailed discussion of the predictions of various analytical models. In the following sections of this paper, we discuss cases in which the theoretical predictions are different from the traditional analytical benchmark.
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