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Consumption-smoothing in a small, cyclically volatile open economy: Evidence from New Zealand

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Abstract

New Zealand's current account of the balance of payments has been persistently in deficit since the early 1970s and increased markedly during the late 1990s. Should this cause significant concern, for such a small, cyclically volatile open economy? Our results show that VAR1 and VAR2 forms of the traditional intertemporal consumption-smoothing model reflect very satisfactorily the volatile directions and turning points observed, that the data are not consistent with consumption-tilting to the present, and that New Zealand has had considerable success to date in consumption-smoothing around its average 5% current account deficit. Perhaps more unexpectedly, a Bergin–Sheffrin-type model of a small open economy with variable interest rates and exchange rates has not performed noticeably better.

JEL classification: E21; F32

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1. Introduction

New Zealand is one of the world's smallest, most cyclically volatile open economies, and has been a significant importer of capital for many decades. Its current account of the balance of payments has been persistently in deficit since the early 1970s, and its current account deficit

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to GDP ratio averaged around 5% during the 1980s and 1990s, varying from lows of 1% to highs of 9% (see Fig. 1).[1]

Should this historically persistent volatility, and the sharp deterioration in the current account deficit in the 1990s be a cause for significant concern for New Zealand and lenders of international financial capital? And should this have led to marked consumption-tilting to the present, or has the outcome simply been ongoing consumption-smoothing around its average deficit to GDP ratio?

New Zealand's current account deficit numbers are clearly in conflict with conventional wisdom, summarised by Milesi-Ferretti and Razin (1996, p. 161) as ''...current account deficits above 5% of GDP flash a red light, in particular if the deficit is financed with short-term debt or foreign exchange reserves, and if it reflects high consumption spending''. Yet a recent analysis of New Zealand's wider sustainability indicators is more sanguine, concluding that ''...although New Zealand's current account deficit is sizeable, and will undoubtedly not remain at such an elevated level in the long-run, there are few reasons to believe that the transition to lower current account deficits will be disruptive to the economy.'' (Collins et al., 1998, p. 30).

In the above context, the key aims of this study are therefore: (1) to establish an illustrative intertemporally optimal ''benchmark'' path for New Zealand's current account, and to identify the extent to which actual current account movements have deviated over time from the consumption-smoothed optimal path and whether international financial flows have been excessively volatile; and (2) to establish preliminary empirical conclusions relating to external solvency.

Our analytical modeling and testing reflect New Zealand's being a small, open, cyclically volatile economy, and the sample period being a particularly interesting and challenging one. The pervasive financial market regulation of the first half of the sample period was comprehensively and rapidly dismantled during the mid-1980s, and the latter part of the period further reflects outcomes from the Asian financial crisis when New Zealand's current account moved strongly into deficit.

Our testing for the most appropriate ''benchmark'' current account path has encompassed not only the traditional intertemporal theoretic and empirical work developed in Sachs (1982), Campbell (1987), Campbell and Shiller (1987), Sheffrin and Woo (1990), Trehan and Walsh (1991), Otto (1992), and Ghosh (1995); but also a small open economy model with variable interest rates and exchange rates of the type tested recently by Bergin and Sheffrin (2000) for Australia, Canada and the United Kingdom.

Our results show that VAR1 and VAR2 forms of the traditional intertemporal consumption-smoothing model reflect very satisfactorily the volatile directions and turning points observed for New Zealand's current account (see Fig. 2), that the data are not consistent with consumption-tilting to the present, and that New Zealand has had considerable success to date in consumption-smoothing around its average 5% current account deficit. Perhaps more unexpectedly, a Bergin–Sheffrin-type model with variable interest rates and exchange rates has not performed noticeably better. This is despite its fixed real interest rate version being rejected in favour of the variable real interest and exchange rate version, dominated by the real exchange rate influence (see Fig. 3, Table 7).

[1] See also Fig. 1 in Kim et al. (2001), and Kim et al. (1994).