NORTH-HOLLAND

Journal of Policy Modeling
24 (2002) 739–749

Journal of Policy Modeling

Exchange rate volatility and currency union: New Zealand evidence☆

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Received 1 October 2001; received in revised form 26 April 2002; accepted 1 June 2002

Abstract

The conventional wisdom is that currency unions reduce exchange rate volatility. By definition, a currency union perfectly stabilizes the nominal exchange rate between the member countries. Nevertheless, variability in exchange rates with non-members matters too. This paper focuses on currency unions and exchange rate volatility with particular reference to New Zealand. For New Zealand, adopting either the Australian or the American dollar in the mid-1980s would not have reduced short-term exchange rate volatility. However, adopting the American dollar would have reduced cyclical exchange rate variability, and would have done so by more than a currency union with Australia.

JEL classification: F33

Keywords: Currency union; Exchange rate volatility; New Zealand

1. Introduction

European monetary union, Latin American dollarization and currency crises in Asian crawling peg countries have focused attention on the question of what exchange rate regime is appropriate. One conclusion that academics and policymakers

☆ The views expressed in this paper are those of the author and do not necessarily represent the views of the Reserve Bank of New Zealand.

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0161-8938/02/$ – see front matter © 2002 Society for Policy Modeling.
PII: S0161-8938(02)00159-X

generally agree on is that only a hard peg or a float is sustainable when capital markets are open (Fischer, 2001). Arguments about which of these two corner solutions is best are based on a trade-off between macroeconomic flexibility and microeconomic efficiency. Some of the supposed efficiency gains are due to lower exchange rate variability.

New Zealand is an interesting case study because it has low, stable inflation and developed financial markets, unlike a number of developing countries, as well as diversified trading partners, unlike some developed countries where adopting a foreign currency has been suggested. Even so, New Zealanders have debated the possibility of adopting either the Australian or the American dollar in place of the New Zealand dollar, which has been floating without intervention since 1985. Each of the main contributions to the New Zealand debate — Coleman (1999), Grimes, Holmes and Bowden (2000) and Hargreaves and McDermott (2000) — has claimed that exchange rate volatility would be lower in a currency union, and this is expected to encourage trade and investment.

This paper revisits the issue of exchange rate volatility and currency union. Section 2 presents motivation for the research, touching on the links between exchange rate volatility and trade and investment. The paper goes on to discuss how currency union affects exchange rate volatility and how volatility considerations affect the choice of an anchor currency (Section 3), before presenting new evidence for New Zealand regarding the effect of alternative currency unions on exchange rate volatility (Section 4). Conclusions follow in Section 5.

2. Exchange rate volatility and currency union

Research into currency unions has recently undergone a renaissance. The topic is prominent in both the academic context and the policy arena, especially with the introduction of the Euro. Running an independent monetary policy gives a country macroeconomic flexibility. When a country enters a currency union this is traded for microeconomic efficiency gains, due to lower transactions costs and increased integration.

The effect of currency union on exchange rate volatility is seldom disputed: going into a currency union would reduce volatility. At least, that is the conventional wisdom. While it is tautological that one country adopting another's currency perfectly stabilizes the nominal exchange rate between the client and anchor,[1] the effective exchange rate will still exhibit some variability. The fact that one bilateral exchange rate is perfectly stabilized is not a sufficient reason to enter a currency union because variability in other exchange rates matters too. It is an open question whether or not effective exchange rate volatility will be lower in a currency union. This paper focuses on this issue with particular reference to New Zealand.

[1] This terminology is taken from Alesina and Barro (2001). The client withdraws its own currency and uses the anchor's currency instead.