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Exchange rate regimes and current account adjustment: An empirical investigation ☆

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ABSTRACT

The acceleration in the formation of global imbalances in the period preceding the last financial crisis prompted a revival of the debate on whether exchange rate regimes affect the flexibility of the current account (i.e. its degree of mean reversion), as originally proposed by Friedman (1953). I analyse this relation systematically using a panel of 180 countries over the 1960–2007 period. I find robust evidence that flexible exchange rate arrangements deliver a faster current account adjustment among non-industrial countries. Additionally, I try to identify channels through which this effect could be taking place. The results suggest that exports respond to expenditure-switching behaviour by consumers when faced with changes in international relative prices, configuring a potential channel.

1. Introduction

The onset of the global financial crisis in 2008 led both the general public and policymakers to focus on a long-dated and persistent phenomenon: the accumulation of global imbalances, as reflected in

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the increasing absolute size of current account (CA) balances across countries.[1] Against this background, an old and controversial question has been brought back into the frontline: do nominal exchange rate regimes affect the persistence of current account balances and, hence, the formation of global imbalances? This paper addresses this question empirically.

It is possible to trace the origins of this debate back more than sixty years. The hypothesis that flexible nominal exchange rate regimes spur a faster mean reversion of the current account (and a consequent correction of imbalances) was first elaborated by Friedman (1953). In particular, he argued that "changes in it [the nominal exchange rate] occur rapidly, automatically, and continuously and so tend to produce corrective movements before tensions can accumulate and a crisis develop." Hence Friedman advocated the advantages of easy-to-adjust exchange rates in a world of rigid nominal prices.

Friedman's (1953) claim has become part of the conventional wisdom in circles of both academics and policymakers, and has been frequently used as a basis for advice in setting reform agendas. However, the empirical validity of Friedman's hypothesis had not been tested until recently. Starting with Chinn and Wei (2013), a small number of studies has attempted to assess whether Friedman's claim is borne out by the data, resulting in opposing and inconclusive results so far.

The aim of this paper is to draw from these first attempts and to improve the approach to testing the hypothesis that flexible exchange rate regimes deliver a faster mean reversion of the current account. To do that I proceed as follows. In line with previous papers, I model the dynamics of the CA as an autoregressive process, allowing the autoregressive coefficient (which governs CA balances' persistence) to vary depending on the exchange rate regime in place. The difference between the estimates of the autoregressive coefficients corresponding to each exchange rate regime, as estimated in a large panel, determines whether these regimes deliver different degrees of persistence of the CA. Additionally, and in contrast to previous papers, I control for the occurrence of sudden stop episodes, which could bias the results as they typically result in a sharp correction of CA deficits and tend to be associated with fixed exchange rate regimes.

By following this strategy I find evidence that strongly supports Friedman's (1953) hypothesis, as non-industrial countries under fixed exchange rate regimes consistently display a higher persistence in their current account balances. This result is robust to a battery of checks, which include alternative FX regime groupings and classifications, correction for outliers, sample selection strategies and the addressing of potential issues of simultaneity and the existence of a mechanical bias. Moreover, the difference in the degree of CA mean reversion across exchange rate regimes is not only statistically significant but also economically meaningful: the half-life of a shock to the current account is approximately 14 months under a flexible FX arrangement, while this figure almost doubles to 25 months when the exchange rate follows a fixed scheme.[2]

Additionally, I try to single-out potential channels through which this effect could be working. I find that the expenditure switching behaviour of consumers substituting between local and foreign products when facing changes in international relative prices is the most robust driver, particularly via its impact on exports.

The paper is structured as follows. Section 2 provides a review of the relevant literature and relates my contribution to it. I then describe the data used in Section 3. In Section 4 I estimate the differential effect of exchange rate regimes on current account persistence, both varying the choice of control variables and then carrying out several robustness checks (Section 5). Finally, in Section 6 I test for potential channels behind the existence of Friedman's (1953) hypothesis, before concluding in Section 7.

[1] It is worth noting that current account balances do not necessarily need to be zero, even in equilibrium (see, for example, Blanchard and Milesi-Ferretti, 2011, for a brief discussion). Hence, the term "current account imbalance" is used in a non-rigorous manner throughout the paper to refer to non-zero balances. This is discussed in more detail in Sections 4 and 5.3.

[2] The half-life is defined as the number of periods required for the impulse response to a unit shock to a time series to dissipate by half. The estimated half-life values should not be taken at face value, as they depend on the exchange rate regime classification used (since the estimated autoregressive coefficients vary). Instead, the emphasis is on the significant difference across exchange rate regimes (for a given classification).