Monetary Policy Reaction Functions and Saving-Investment Correlations: Some Cross-Country Evidence

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I. Introduction

The level of international capital mobility between countries is clearly an important issue for various reasons. First, incidence and welfare effects of taxes are sensitive to what is assumed about capital mobility. Second, effectiveness of monetary and fiscal policy depends on capital mobility in addition to the exchange rate system. Therefore, it is not surprising at all that a considerable amount of attention has been paid to the question of how the level of international capital mobility should be measured. One may proceed (i) by comparing movements of rates of return on capital across countries, (ii) by analysing the capital flow equations [see e.g. Kouri and Porter, 1974] or (iii) by looking at the saving-investment relationships. Feldstein and Horioka [1980] argued that in a world characterized by high capital mobility there is no a priori reason to expect saving and investment to be correlated across countries. If one assumes that structural factors affecting saving and investment are not correlated, domestic saving and investment rates will also be uncorrelated. If, on the other hand, capital mobility is restricted, then saving and investment will be correlated. Indeed, in the extreme case of zero capital mobility, saving and investment would be perfectly correlated.

The finding of Feldstein and Horioka [ibid.] that countries' investment rates are highly correlated with their national saving rates has

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now been confirmed by many subsequent studies using both cross-section and time-series regressions over different sets of countries and time periods (see e.g. Dooley et al. [1987] for a survey of the literature, see also Bayoumi [1990]). But there is currently very little agreement on explanations of this apparent empirical regularity. Three broad sets of explanations for these high correlations have emerged: (a) low international capital mobility, (b) private sector behaviour and (c) government targeting of the current account.\(^1\)

Despite other evidence, for various reasons – like information constraints, exchange risk with risk aversion, exchange controls etc. – international capital mobility may be very low. This was the original explanation proposed by Feldstein and Horioka [1980] and reaffirmed by Feldstein [1983] and Feldstein and Bacchetta [1989].\(^2\) The interpretation (b) has been challenged by a number of researchers. On the one hand, it has been argued that even though capital mobility would be perfect, national saving and investments are correlated because they both react to some common shocks, like business cycle shocks, productivity shocks and/or population growth [see e.g. Obstfeld, 1986]. But there are problems with this interpretation (b); it has been argued by Summers [1988] and by Feldstein and Bacchetta [1989] that evidence does not support the "spurious factor" explanation for the close association of national savings and investment rates (for an attempt to use newly-developed co-integration techniques to study the issue, see Miller [1988]). On the other hand, it has been argued that the close

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1 Naturally, in terms of policy implications it matters very much which explanation is adopted. With low international capital mobility (interpretation (a)) policies to promote domestic saving should also raise domestic investments. But if correlations reflect private sector behaviour in the presence of high international capital mobility, then policy-induced changes in domestic saving will tend to flow abroad. The possibility that governments have been targeting the current account not only raises the question of optimality of such a policy, but also makes it difficult to analyse the effects of e.g. various tax policies.

2 It is difficult to provide direct tests for the low international capital mobility explanation. A piece of evidence against the hypothesis of capital immobility is that saving-investment correlations are higher for industrial countries with rather well-functioning capital markets than for the developing countries [see e.g. Dooley et al., 1987]. Moreover, it is useful to point out that the perfect capital mobility alone does not necessarily imply a negligible effect of autonomous shifts in domestic saving on domestic investments. The additional assumption that the country is small relative to the world capital market is also needed. If the country is large enough, then e.g. a rise in its domestic saving will decrease the world interest rate and thereby increase investments. Thus, in terms of saving-investment correlations there should be some distinction between groups of large and small countries. Murphy [1984] provides some – though far from conclusive – evidence in favour of a "country-size hypothesis".