Are capital controls in the foreign exchange market effective?[☆]

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ABSTRACT

One of the reasons for governments to employ capital controls is to obtain some degree of monetary independence. In this paper we test whether capital controls can reduce the link between exchange rates fluctuations and cross border interest differentials. Recent capital control proxies are used in order to determine the date of capital account liberalization for a panel of Western European and emerging countries. Results show that capital controls have a very limited effect on observed deviations from interest parities, even when accounting for the political risk associated with capital controls.

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1. Introduction

Academic and policy debates about vices and virtues of capital controls exist for a long time and opinions on their usefulness swing like a pendulum. The argument dates back as far as the mercantilists who sought to control flows of bullion. This ideological school was subsequently denounced by Adam Smith in favor of free markets. The 20th century saw a large revival of capital controls, driven by

the war effort of both world wars. Afterwards the Bretton Woods system combined capital controls with fixing exchange rates. Keynes considered capital controls as an important cornerstone to financial stability during the Bretton Woods system – an idea revived by Tobin (1978). The meltdown of the Gold Exchange Standard induced a liberalization wave that lasted through the 1990s. The aftermath of the Asian crisis made some reconsider the wisdom of the widespread liberalization and the debate was re-oriented once more. Nowadays, a significant fraction of the academic community supports controls in specific circumstances, see e.g. Krugman (1999) or Rodrik (1998), and advocates of a well-thought phasing out of capital controls.

The classic argument in favor of capital controls goes back to the welfare theory of the 'second best': in the presence of market imperfections (incomplete markets, asymmetric information, transaction costs etc.) additional distortions such as capital controls might be welfare enhancing by offsetting some of the previous distortions' negative welfare effects. However, capital controls remain a distortion and as such should only be maintained if the benefits outweigh the costs. And the potential costs are numerous: capital controls have to be regularly revised to close loopholes; time and resources have to be expended to execute the controls; controls limit the potential for portfolio diversification and decrease the amount of risk that can be shared and diversified (Voth, 2003) and increase the cost of capital for local firms (Bekaert and Harvey, 2000); capital controls potentially increase exchange rate volatility (Glick and Hutchison, 2005) and the risk of currency crises (Bordo et al., 2001).

This paper's goal is not to perform a full-fledged welfare analysis to quantify direct and indirect costs and benefits of capital controls: our ambition is rather more modest in that we want to investigate whether capital controls are able to bring more 'monetary freedom' in the foreign exchange market. Loosely speaking, 'monetary freedom' can be thought of as the desire to manage domestic monetary policy in a more independent way from the exchange rate. Monetary freedom constitutes one of the classic motivations for governments to impose capital controls (Magud et al., 2011). The potential gain in monetary freedom allows governments to use the monetary and fiscal instruments more effectively together to steer the domestic economy.

Magud et al. (2011) survey the literature and conclude that inflow controls (but not outflow controls) contributed to increased monetary freedom in several well documented cases like Chile, Colombia, Malaysia and Thailand. In a broader setting, including more countries, this effect cannot be replicated: Montiel and Reinhart (1999) show that capital controls do not improve the ability of monetary policy to change the composition of capital flows (although capital controls themselves may have a direct effect on the composition); Edison and Reinhart (2001) find that capital controls do not affect the co-movement of domestic and foreign interest rates, and Miniane and Rogers (2007) show that the presence of capital controls do not diminish the impact of U.S. monetary policy shocks on the domestic economy.

In this paper we take an alternative route to assess the effect of capital controls on 'monetary freedom'. We investigate to what extent capital controls contribute to deviations from the (covered and uncovered) interest parity conditions for foreign exchange. Given the potential of capital controls to limit arbitrage and speculation, exchange rate parity conditions constitute a natural testing framework for the 'monetary freedom' hypothesis: the well-known Covered and Uncovered Interest Parity relations relate cross-border interest differentials to current and future (expected) price formation in foreign exchange markets in the following way:

$$(f - s)_t = (i - i^*)_t, \tag{1}$$

$$E_t s_{t+1} - s_t = (i - i^*)_t, \tag{2}$$

with E_t the rational expectations operator, s_t and f_t the natural logarithms of the nominal bilateral spot and 1-month forward exchange rate, expressed in domestic currency per unit of foreign currency, and i and i^* domestic and foreign interest rates on monthly deposits, respectively.[1]

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[1] The majority of the empirical literature studying deviations from these parity conditions tests these equations using a monthly time horizon. For sake of comparability we therefore opt for the same time horizon and data frequency.