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Collateral damage: Exchange controls and international trade

Shang-Jin Wei [a,b,*], Zhiwei Zhang [b]

[a] *Graduate School of Business, Columbia University, New York, NY 10027, USA*
[b] *Research Department, International Monetary Fund, 700 19th Street, N.W., Washington, DC 20431, USA*

Abstract

While new conventional wisdom warns that developing countries should be aware of the risks of premature capital account liberalization, the costs of not removing exchange controls have received much less attention. This paper investigates the negative effects of exchange controls on trade. To minimize evasion of controls, countries often intensify inspections at the border and increase documentation requirements. Thus, the cost of conducting trade rises. The paper finds that a one standard deviation increase in the controls on trade payment has the same negative effect on trade as an increase in tariff by about 14 percentage points. A one standard deviation increase in the controls on FX transactions reduces trade by the same amount as a rise in tariff by 11 percentage points. Therefore, the collateral damage in terms of foregone trade is sizable.

JEL codes: F1; F2

Keywords: Capital controls; Capital account liberalization; Trade flows; Non-tariff barriers

* Corresponding author. Research Department, International Monetary Fund, 700 19th Street, N.W., Washington, DC 20431, USA. Tel.: +1 202 623 5980; fax: +1 202 589 7271.
E-mail address: swei@imf.org (S.-J. Wei).

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1. Introduction

Since the emerging market crisis of the 1990s, a new conventional wisdom has emerged that developing countries should be alert to the adverse effects of premature capital account liberalizations (see Rodrik, 1998; Stiglitz, 2002; and other papers reviewed by Prasad et al., 2003). In comparison, the costs of not removing exchange controls have received much less attention in empirical research. A notable exception is a study by Forbes (in press) which estimated the effect of Chile's capital controls (''encaje'') in the early 1990s on the cost of borrowing faced by its medium-sized publicly-listed firms.

In this paper, we estimate another possible collateral damage of exchange controls, namely their effects on international trade, and compare them to those of tariff and other non-tariff barriers (NTBs). The study was motivated in part by a conversation we had some years ago with the chief of the national foreign exchange control administration of a country which shall remain anonymous. As the country was on a fixed exchange rate regime (and any change in the regime was to be decided by the government cabinet rather than by the foreign exchange control administration) and by then had permitted current account convertibility of its currency, we asked the chief why his bureau needed to have a large staff nationally. The response was that it was common for firms and individuals to try to circumvent capital account restrictions by mis-invoicing imports, exports or both, and his staff had to implement various inspections to minimize such leakages. It dawned on us that attempts to enforce exchange controls have most likely raised the cost for firms to engage in exports and imports. How much extra cost these controls effectively impose on international trade is the subject of the current research reported here.

The paper combines three unique panel data sets: (a) a detailed description (192 indicators) of the exchange controls for up to 184 countries since 1996 in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) database; (b) importer–partner country-specific tariff rates from the UNCTAD's Trade Analysis and Information System (TRAIN), retrieved via the World Integrated Trade Solution (WITS) at the IMF; and (c) a rating of the extent of non-tariff barriers from the IMF's Trade Restrictiveness Index database. These data are then combined with bilateral trade data from the IMF's Direction of Trade database as well as additional control variables from other sources. The econometric specification is grounded in the theory of trade volume, including recent development in Anderson and Van Wincoop (2003) and Helpman et al. (2005).

To our knowledge, Tamirisa (1999) was the first and the only other paper that studied the effect of exchange restrictions on trade. Due to data limitation, her sample covers only one year (1996) and 40 countries. Perhaps more importantly, the estimation was based on a misspecified model as it did not incorporate separate importer and exporter fixed effects which are required of by economic theory. For example, Anderson and Van Wincoop (2003) show that the omission of these fixed effects has artificially generated the so-called ''border effect'' in trade volume. Subramanian and Wei (2007) show that the inclusion of the fixed effects can reverse Rose's (2004) conclusion on the ineffectiveness of the WTO in promoting trade. It is therefore important to specify the trade volume equation in a way that is consistent with economic theories.

Due to the comprehensive descriptions of the exchange controls in the AREAER database since 1996, we are able to construct separate indicators for (a) controls on proceeds from exports and payments for imports, (b) controls on capital transactions, and (c) controls on foreign exchange (FX) transactions and other items not specific to goods trade or capital transactions. Note that the phrases ''capital controls'' and ''exchange controls'' are used interchangeably in