0440

IMF WORKING PAPER

© 1989 International Monetary Fund

October 27, 1989

WP/89/83

Subject: Risk Neutrality and the Two-Tier Foreign
          Exchange Market: Evidence from Belgium

CORRIGENDUM

An incorrect Table 5 was inadvertently included in WP/89/83 (10/11/89). A corrected table (page 17) is attached.

Att: (1)

Table 5. Regressions of the Spread

1. Estimation period 1963 II - 1988 I; 99 observations, DW = 1.982, R^2 = 0.1304

Constant	$\frac{G_t}{P_t}/\frac{G_{t-1}}{P_{t-1}}$,	$\frac{Y_t}{P_t}/\frac{Y_{t-1}}{P_{t-1}}$,	i^* ,	P^*_t/P^*_{t-1} ,	M_t/M_{t-1}
0.123824 + 01**	0.652163-02	0.501735-01	0.349131**	-0.254646	-0.453579-01
(7.14363)	(0.834018)	(0.812183)	(3.14029)	(-1.57265)	(-1.54900)

2. Estimation period 1963 II - 1972 I; 35 observations, DW 1.887, R^2 = 0.2186

Constant	$\frac{G_t}{P_t}/\frac{G_{t-1}}{P_{t-1}}$,	$\frac{Y_t}{P_t}/\frac{Y_{t-1}}{P_{t-1}}$,	i^* ,	P^*_t/P^*_{t-1} ,	M_t/M_{t-1}
0.678861	-0.361403-02	-0.240131-01	0.60501*	0.30596	0.208706-01
(1.84788)	(-0.203460)	(-0.231851)	(2.63317)	(0.921802)	(0.568288)

Notes: Numbers in parentheses are T-statistics. The price ratio in the regression is the inverse of the price ratio in the euler equation, so we would expect a negative coefficient in the regression. Both regressions have been corrected for first order serial correlation.

was not an exogenous variable during the sample period. The Belgian monetary authority may have been sterilizing reserve movements during the sample period.

VI. Extensions

1. Inter-market leakages

It is widely acknowledged that it is virtually impossible to maintain complete separation of the two exchange markets depending on the source or use of the foreign exchange. Nevertheless, because of analytical complexities, the number of studies that incorporate leakages has been quite small. 1/ The purpose of this extension is to investigate the effects of intermarket leakages on the simplicity of our results.

With leakages, the agent's budget constraint needs to be modified to:

$$P_{t+i}c_{t+i} + \left[\theta X_{t+i} + (1-\theta)S_{t+i}\right]B^*_{t+i} =$$

$$P_{t+i}y_{t+i} + \left[\lambda X_{t+i} + (1-\lambda)S_{t+i}\right]i^*_{t+i-1}B^*_{t+i-1} +$$

$$\left[\alpha X_{t+i} + (1-\alpha)S_{t+i}\right]B^*_{t+i-1}$$

where θ is the share of foreign securities purchased at the capital account rate, λ is the share of interest proceeds on foreign-currency denominated security holdings repatriated at the capital account rate and α is the share of foreign-currency denominated securities sold at the capital account rate. Our no leakage analysis assumed $\theta = 1$, $\lambda = 0$, and $\alpha = 1$. Retaining our other assumptions, the first-order condition is now:

$$\frac{\left[\theta X_t + (1 - \theta)S_t\right]}{P_t} =$$

$$\rho E_t\left\{\frac{[\lambda X_{t+1} + (1-\lambda)S_{t+1}]i^*_t + [\alpha X_{t+1} + (1-\alpha)S_{t+1}]}{P_{t+1}}\right\} \quad (10)$$

1/ See Bhandari and Decaluwe (1987) and Gros (1988).