Microeconomics

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Microeconomics" Covered Interest Arbitrage By 22 April Covered Interest Arbitrage – Calculations & Discussion Calculations: WinningAmount = € 1, 000, 000 (After Tax)

Based on the exchange rate $ 1 = € 0. 7 the after tax winning amount in US Dollars can be calculated as follows:

$ 1 = € 0. 7

€ 1 = $ 1/ 0. 7

€ 1 = $ 1. 43

€ 1000, 000 = $1. 43 *1000, 000

€ 1, 000, 000 = $ 1, 428, 571

Irish interest rate for one year CD = 2%

US interest rate for one year CD = 4%

After one year investment in Ireland

Amount = Principle (1 + Interest rate)

= 1, 000, 000 (1+0. 02)

= € 1, 020, 000

After one year investment in US

Amount = Principle (1 + Interest rate)

= 1, 428, 571 (1+0. 04)

= $ 1, 485, 714

Based on the new exchange rate $ 1 = € 0. 65 the worth of the Irish bank account in US dollars can be calculated as follows:

$ 1 = € 0. 65

€ 1 = $ 1/ 0. 65

= $ 1. 54

€ 1, 020, 000 = $ 1, 569, 231

Comparing the two amounts:

Option 1: Investing in one year CD in US yields $ 1, 485, 714

Option 2: Investing in one year CD in Ireland and then converting the Euros into US dollars on the present exchange rate yields $ 1, 569, 231

The comparison favours option 2. I will be better off investing in Ireland as the resultant dollar amount is greater when invested in Ireland.

' Covered Interest Arbitrage is buying a country's currency spot and selling that country's currency forward, to make a net profit from the combination of the difference in interest rates between countries and the forward premium on that country's currency.' (Pugel, 2008) The banks and investors can take advantage of the covered in arbitrage by investing in foreign currency and locking the position and eliminating the foreign exchange risk by entering into a forward contract. The forward contract involves buying the home currency at a future date equal to the amount received of the foreign currency at that future date. The exchange rate at which the two currencies will be exchanging in the forward contract at the preset future date is fixed and thus the investor is saved from the risk of adverse exchange rate movements. This method eliminates the downside risk but also puts a cap on the profits that could have been received if the exchange rate moved favourably instead of unfavourably.

The Purchasing Power Parity is an important concept which links prices, exchange rates and inflation. ' Three versions of PPP have traditionally been used in the literature.' (Clark, Bartolini, Bayoumi & Symansky, 1994) These

versions include the law of one price, absolute PPP and relative PPP. ' In relative terms, PPP says that exchange rate move in line with the interest rate differential.' (Rochon & Vernengo, 2001) On the long-term basis, the lower the inflation the more the currency appreciates and the higher the rate of inflation the greater is the magnitude of the currency's depreciation.

In terms of the of the Ireland and US, the exchange rate went down from $1/€0. 70 to $1/€0. 65 for the US dollar indicating the depreciation of US dollar in terms of Euro and hence signalling inflation in the US market. On the other side of the picture an appreciation of the Euro signifies low inflation and high growth in the Irish market. In terms of the goods the US dollar could buy € 0. 7 worth of goods one year back and now it can afford only € 0. 65 for the same dollar. Thus the US dollar depreciated indicating inflation in the US market and showing an appreciation of the Euro.

References:

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Pugel, T. (2008). International economics. (p. 401). New Delhi: Tata McGraw-Hill Publishing Company Ltd.

Rochon, L., & Vernengo, M. (2001). Credit, interest rates and the open economy: Essays on horizontalism. (p. 214). Massachusetts: Edward Elgar Publishing Inc.