The international finance

Finance

InternationalFinanceis a branch of the entire financial industry, involving the relationship between two or more countries' monetary policy and macroeconomic. International financial researches the global financial system, international monetary system, balance of payments, exchange rates, FDI. It is sometimes also referred to as cross-border finance. In addition to issues mentioned before, international financial studies investors and multinational corporations, as well as the international risks firms may face.

This essay will mainly discuss the international finance by analyzing three different countries' interest rate, inflation rate, spot and forward rate (USA: Dollar; UK: Pound; Australia: Australian Dollar). With the analysis of these rates, the essay will also check the purchasing power parity and the interest rate parity, which seem to be the most important theories in international finance. When dealing with the spot and forward rate, the easy will analyze whether the forward rate is an unbiased estimator of the spot rate. Based on the theory learnt, data and calculations will also be carried out to make the analysis more convincible.

The inflation rate differentials analysis

This section addresses two empirical questions concerning the three main economies, i. e. USA, UK and Australia. The questions are whether the inflation differentials exist within the world scope; and how sizable they are. The inflation rate is one of the most important measures of inflation, the rate of the increase of a price index over a specific period of time. It is the percentage change in overall price level within an economy over time. The price of a currency is determined by the demand for that currency relative to supply, which means inflation comes with a rising demand ofmoney.

For USA, from the first quarter of 2009 to the third quarter of 2009, the inflation rate of USA keeps at a negative level, which is linked with the low currency value in the foreign exchange market. It needs to adjust the currency's price for the currency department. From the fourth quarter of 2008 on, the USA inflation rate turns out to be positive. It is the adjustment by the currency authority that makes equilibrium between supply and demand of the money.

It is well known that negative inflation rate is harmful to the economy. As a result, the exchange rate of US dollar to UK pound rises slightly from 1. 4521 to 1. 6002, during the first three quarters of 2009, followed by a small down turn in quarters afterwards. It is also basic knowledge that when the value of one currency goes up, people in that country will tend to buy more foreign goods than domestic goods, because foreign goods become relatively cheaper. However, when more domestic currency is transacted in the world market, it will depreciate against other currencies gradually. As is shown in the tables above, inflation rates in these three countries (US, UK, Australia) are changing all the time from 2009 through 2011.

The interest rate differentials analysis

The interest rate differential measures the gap in interest rates between two similar interest-bearing assets. When traders want to price forward exchange rate, they usually use interest rate differentials (IRD). According to the interest rate parity, a trader can easily expect the future exchange and can also set a premium or a discount on the current market exchange rate contracts between two currencies.

The interest rate is changed for the use of money or paid for the save of the money. The changes of interest rates affect investors' decision in investing foreign securities. Different interest rates will also influence the demand and the supply of currencies, and therefore it will have an effect on the exchange rate.

From the data calculated above, we can see that the PPP theory sometimes can hold true and sometimes not. The ratio of Australia, in the last three quarters of 2010 and also in the first three quarters of 2009, stays within the range between -1 and 1, which shows that the purchasing power parity is right. However, in other quarters the ratio of Australia is not within that level, e. g. in 2011 this ratio exceeds ten. For UK, the ratio of all these quarters is nearly zero, which also clarifies the preciseness of PPP. Conclusively, the purchasing power theory is almost proved by the truth of these countries.

Calculate and analysis the interest rate parity theory

Interpretation of interest rate parity

Interest rate parity is a no-arbitrage condition where investors should be indifferent to the common interests of the bank deposits in the two countries. The two key assumptions of interest rate parity are capital mobility and perfect substitutability of domestic and foreign assets. Under interest rate parity condition, the expected return on domestic assets is the same as the expected return on foreign currency, due to the equal balance on the foreign exchange market. When the investor of one country receives a higher interest rate from the foreign investment, the investor is paying more per unit of foreign currency than what is received per unit when the currency is sold forward.

Formula derivation of Interest rate parity

Assume that the investor who attempts covered interest arbitrage. The amount of the domestic currency is initially invested (Qd), the spot rate (Sd) in the domestic currency when the foreign currency is purchased. The interest rate on the foreign deposit (if), and the forward rate (f) in the domestic currency are the rates that the foreign currency will be converted back to the home currency.