# Purchasing Power Parity (PPP)

The **PPP Hypothesis** states that the exchange rate between two countries' currencies equals the ratio of the currencies' purchasing power, as measured by national price levels.

$$e_s = P/P_F$$

#### The Law of One Price

The Law of One Price states that in competitive markets free of transportation costs and official barriers to trade, identical goods sold in different countries must sell for the same price when their prices are expressed in terms of the same currency

### The Implied PPP of the \$

The Implied PPP of the \$ is the exchange rate that would leave a good, such as the McDonald's Big Mac, costing the same in the United States as in any other country where the Big Mac is being sold.

The Implied PPP of the \$ is the ratio of the price of a Big Mac in local currency to the price of a Big Mac in the United States.

# Factors Influencing Price Levels

Relative Money Supply,

MS / MS

where, M<sup>s</sup> is the money supply at home;

M<sup>s</sup><sub>F</sub> is the money supply in foreign

Relative Real Domestic Product (GDP),

YF/Y

where, Y<sub>F</sub> is the real GDP in foreign;
Y is the real GDP at home

# Money and PPP Combined

 $e_s = P / P_F = (M^s / M^s_F) (Y_F / Y)(k_F/k)$ where, es is the spot exchange rate; P is the price level at home; P<sub>F</sub> is the price level in foreign; M<sup>5</sup> is the money supply at home; M<sup>5</sup><sub>F</sub> is the money supply in foreign; Y<sub>F</sub> is the real GDP in foreign; Y is the real GDP at home; and k<sub>F</sub>/k is equal to 1 by assumption.