LEHIGH University

Pennsylvania

Lehigh Valley Workforce Investment Board, Inc.

WALL STREET WEST®

Topic: Cross Exchange Rates

Description: Examine the relationship among two or more currency rates.

Go to http://finance.yahoo.com/currency

Major Currency Cross Rates								
Currency Last Trade		U.S. $ N/A	¥en 10:11am ET	Euro 10:10am ET	Can $ 10:11am ET	U.K. £ 10:10am ET	AU $ 10:10am ET	Swiss Franc 10:11am ET
1 U.S. $	=	1	109.6250	0.6508	1.0498	0.5146	1.1019	1.0618
1 ¥en	=	0.009122	1	0.005937	0.009577	0.004694	0.010051	0.009685
1 Euro	=	1.5365	168.4388	1	1.6131	0.7906	1.6930	1.6314
1 Can $	=	0.9525	104.4197	0.6199	1	0.4901	1.0495	1.0113
1 U.K. £	=	1.9433	213.0395	1.2648	2.0402	1	2.1413	2.0633
1 AU $	=	0.9075	99.4901	0.5907	0.9528	0.4670	1	0.9636
1 Swiss Franc	=	0.9418	103.2493	0.6130	0.9888	0.4846	1.0378	1

One way to demonstrate the *law of one price* or *no arbitrage opportunities* is to examine the price relationship among three currencies. As a former chemistry student, I cannot help but think of this as moles/liter, grams/mole, and grams/liter. The example below shows that when you buy **Japanese Yen** with **U.S. Dollars**, you can also buy **Euros** with **dollars** and then **yen** with **Euros** and should pay the same price (ignoring bid/ask spreads and commissions).

$$\frac{US\$}{Yen} = \frac{US\$}{Euro}\frac{Euro}{Yen}$$

$$0.009122 = (1.5365)(0.005937)$$

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