The Gaucho Bira minicase:

Illustrating how deviations from PPP affect competitiveness.

Background.

Gaucho Bira is the leading beer in the small South American country of Eldorado, with a whopping two-thirds of the market. Because of trade barriers, it faces essentially no import competition. Exports account for less than 3% of its total sales. Although some of its raw materials are bought overseas, the large majority of the value added comes from locally-supplied goods and services. Over the past five years, consumer prices in Eldorado have risen by approximately 300%; meanwhile U.S. prices have risen by only about 10%. During the same time period, the local currency, the Eldoradoan peso, has depreciated from peso 1 = $1 (parity) to peso 2 = $1.

Questions.

a. What has happened to the domestic purchasing power of the peso over the past five years?

b. What has happened to the real dollar value of the peso over the past five years?

c. What has the high inflation over the past 5 years likely done to Gaucho Bira’s peso profits?

d. Based on your answer to part b., what has been the likely effect of the change in the peso’s real value on Gaucho Bira’s peso profits converted into $?

e. Gaucho Bira has applied for a U.S. dollar loan to finance its expansion. If a loan officer were to look solely at GB’s past financial statements to judge its credit worthiness, what would be the officer’s likely response to its dollar loan request?

f. What FX risk would such a loan face?
The Gaucho Bira minicase:

Illustrating how deviations from PPP affect competitiveness.

Background.

Gaucho Bira is the leading beer in Eldorado, with a 65% share of the market. Because of trade barriers, it faces essentially no import competition. Exports account for less than 2% of its total sales. Although some of its raw materials are bought overseas, the large majority of the value added is provided by locally-supplied goods and services. Over the past five years, Eldorado’s prices have risen by 300%, while U.S. prices have risen by only about 10%. During this time period, the value of the Eldoradoan peso has dropped from peso 1 = $1 to peso 1 = $0.5.

Questions.

a. What has happened to the purchasing power of the peso over the past five years?

Answer.

Over the last five years, the purchasing power of the peso has fallen by 300%, i.e., at the rate of inflation. Put differently, one peso now affords 300% fewer Eldoradoan goods than it used to five years ago.

b. What has happened to the real dollar value of the peso over the past five years?

Answer.

Here, we must compare how the peso's purchasing power has changed, relative to the dollar's, after adjusting for nominal exchange rate changes. Put differently, we want to determine how many more or less U.S. goods one peso now affords, compared to five years ago.

Intuitively, inflation differentials in the two countries during the last 5 years were 290%. In the same period of time, nominal peso depreciation was 50% (i.e., the $ appreciated by 100% against the peso). Since the numbers do not match, a real FX-rate change has taken place. More precisely, the peso has not depreciated enough in nominal terms to compensate for the higher inflation rate in Eldorado: hence, it has appreciated in real terms.

Formally, using the approach learned in class, we see that the real value of the peso (in dollar terms) is now $1.818 = $0.5 \times (1+3)/(1+.1). Five years ago, it was $1. Thus, the real value of the peso has increased by 81.8% over the last five years.
c. What has the high inflation over the past 5 years likely done to Gaucho Bira’s peso profits?

**Answer.**

A reasonable assumption is that both GB's sale and its costs have risen at the same speed. This means that the difference between the two, GB's profits, have also gone up at the same rate - though the rate of profit on sales has probably not changed. In fact, costs here have probably risen at less than the rate of inflation, because some of the inputs are imported from overseas – paid for with U.S. dollars that have depreciated in real terms against the peso.

d. Based on your answer to part b., what has been the likely effect of the change in the peso’s real value on Gaucho Bira’s peso profits converted into $?

**Answer.**

Given the answers in b. and c., each peso of profits 5 years ago have become at least 4 pesos now. On the other hand, the peso has only fallen from $1/p to $0.5/p today. Hence, converting the peso profits into $ at the lower current exchange rate -- 0.5$ -- yields at least $2 worth of profits today for every dollar of profits 5 years ago.

e. Gaucho Bira has applied for a U.S. dollar loan to finance its expansion. If a loan officer were to look solely at GB’s past financial statements to judge its credit worthiness, what would be the officer’s likely response to its dollar loan request?

**Answer.**

The real appreciation of the Eldoradoan peso has done marvels for GB's dollar profitability, as the answer in d. illustrates. Thus, any analysis of creditworthiness based solely on GB's financial statements would show a very profitable and successful company -- one deserving a loan.

f. What FX risk would such a loan face?

**Answer.**

The profitability of GB is an artifact of the peso's real appreciation. It is artificial and likely to be unsustainable. A bank lending U.S. dollars to GB would probably face two problems:

1. First, if (or rather, when) the exchange rate is finally able to adjust to reflect PPP, the peso may depreciate significantly – wiping out the fat dollar profits.
2. Second, if the exchange rate does not adjust to reflect PPP, then GB is at risk of the trade barriers' disappearing – in which case, it will face cheap imports that may wipe it out and, hence, substantially increase the likelihood of default on the loan.