# **Problem Set #1**

## International Transactions

**and Exchange Rates**

1. On page 2 is the structure of the balance of payments accounts for a country, Wonkland, whose currency is the policio, denoted P, and whose capital city is Bene Costa. Suppose that during the year 1999, all of the international transactions of Wonkland were those listed below. Enter them into the country’s balance of payments accounts on page 2, identifying each with its ID, the letter next to which it appears below.
   1. A Wonkish corporation sells a shipment of hot gas to France, accepting as payment P750 worth of shares in a Chinese laundry in Paris.
   2. A group of Wonklander children collects P140 worth of canned vegetables which they send to a group of undernourished fashion models in New York City.
   3. A Wonk father orders Ned Gramlich’s book on Benefit-Cost Analysis as a birthday gift for his 12-year old daughter, charging it to his Visa card issued by Citibank in New York. The price of the book is P0.15.
   4. The Wonkian president, Susan Columns, buys an Exocet missile from a French firm for P3,000,000, promising that the next administration will pay for it. She then contributes the missile to the government of an unnamed country as “humanitarian aid.”
   5. Russ Parrot, a wealthy Wonknavian businessperson, withdraws DM 10,000,000 from his Swiss bank account, exchanges it for P2,340,000 in the foreign exchange market, and deposits the proceeds into his campaign fund where they are used to purchase Wonkovian treasury bills from a resident of Hong Kong.
   6. Karenthian Columns, daughter of Susan, is paid royalties of P1,740 on sales of a book that she had previously ghost-written in the name of the family cat and published with a Japanese publisher. The royalties arrive from the publisher as a packet of small-denomination policio notes in a plain brown wrapper.
   7. The national treasury of Wonkland makes interest payments on its national debt, including a check for P3,178 to U.S. resident Mary Corcoran. Corcoran mislays it and does not cash it until year 2000.
   8. The Ford School of the University of Michigan, having commissioned construction of a subsidiary in Bene Costa, purchases architectural drawings of the building from a Wonkese firm. It pays P450,000 for these, writing a check on the School’s account in the Bank of Bene Costa.
   9. The Bank of Bene Costa reports an increase of P42,000 in its deposits. The deposit was in fact made by the American rock star once known as Prince, but because the deposit slip bore no name, the bank does not know where this money came from.
   10. The Wonkeral Reserve Bank, which is the central bank of Wonkland, uses part of its reserves of Canadian dollars to purchase P815,000 from a Canadian student who wishes to liquidate her deposits in the Bank of Bene Costa out of fear of a policio devaluation.

**Balance of Payments of Wonkland, 1999**

**(P)**

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|  | |  | | |  | Credits (+) |  | ID |  | Debits (­–) |  | ID |
| **Current Account** | | | | |  |  |  |  |  |  |  |  |
|  | Merchandise | | | |  |  |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |  |  |
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|  | Services | | | |  |  |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |  |  |
|  | Investment Income | | | |  |  |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |  |  |
|  | Unilateral Transfers | | | | Private |  |  |  |  |  |  |  |
|  |  | | | |  |  |  |  |  |  |  |  |
|  |  | | | | Government |  |  |  |  |  |  |  |
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| **Financial Account** | | | | |  |  |  |  |  |  |  |  |
|  | Wonk Assets Abroad | | | |  |  |  |  |  |  |  |  |
|  |  | | Wonk Official Reserves and Other Assets | | |  |  |  |  |  |  |  |
|  |  | |  | | |  |  |  |  |  |  |  |
|  |  | | Wonk Private Assets | | |  |  |  |  |  |  |  |
|  |  | |  | Direct Investment Abroad | |  |  |  |  |  |  |  |
|  |  | |  | Foreign Securities | |  |  |  |  |  |  |  |
|  |  | |  | Bank & Nonbank Claims & Currency | |  |  |  |  |  |  |  |
|  |  | |  |  | |  |  |  |  |  |  |  |
|  |  | |  |  | |  |  |  |  |  |  |  |
|  | Foreign Assets in Wonkland | | | | |  |  |  |  |  |  |  |
|  |  | | Foreign Official Assets in Wonkland | | |  |  |  |  |  |  |  |
|  |  | |  |  | |  |  |  |  |  |  |  |
|  |  | | Foreign Private Assets in Wonkland | | |  |  |  |  |  |  |  |
|  |  | |  | Direct Investment in Wonkland | |  |  |  |  |  |  |  |
|  |  | |  | Wonk Securities | |  |  |  |  |  |  |  |
|  |  | |  | Bank & Nonbank Claims & Currency | |  |  |  |  |  |  |  |
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| **Statistical Discrepancy** | | | | | |  |  |  |  |  |  |  |

Calculate the following for Wonkland for 1999:

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| --- | --- | --- |
| **Memoranda** | |  |
|  | Balance on Merchandise Trade |  |
|  | Balance on Goods, Services, and Income |  |
|  | Balance on Current Account |  |
|  | Balance on Financial Account |  |
|  | Change in Reserves |  |

1. During the late 1990s (believe it or not), the U.S. government budget turned from deficit to surplus. Meanwhile, the U.S. current account deficit continued to grow. What does that tell you about private investment and/or private savings in the United States in that period?
2. For each of the following events, determine how you would expect them to affect the exchange value of the indicated currency. Use a conventional exchange market analysis with downward sloping excess demand for foreign currency.
   * 1. The British pound: The Bank of England conducts expansionary monetary policy that lowers British interest rates.
     2. The Australian dollar: World fashion turns toward a major Australian export, wool.
     3. The Hong Kong dollar: Speculative expectations of rising real estate prices attract foreign buyers to Hong Kong properties.
     4. The Mexican peso: Unionization of the Mexican workforce raises wages there.
     5. Israeli shekel: The United States cuts in half its foreign aid to Israel.
     6. Russian ruble: An illness suffered by Russia’s President Putin creates expectations that the value of the ruble will fall.
     7. U.S. dollar: A new fad leads most American girls and young women to wear saris purchased from India.
3. For each of the events that you examined in questions 3, indicate how, if at all, your answer would change if the exchange rate were completely and only determined by
   * 1. Purchasing power parity
     2. The asset theory of the exchange rate