



Balance of Trade and Exchange Rate

The Balance of Payments Accounts

- ▶ The balance of payments accounts provide a summary of all transactions between Canadian residents and foreigners that involve exchanging Canadian dollars for some other currency.
 - ▶ Receipts (shown by a + sign) represent monetary inflows to the Canadian economy.
 - ▶ Payments (shown by a - sign) represent monetary outflows from the Canadian economy.

The Current Account

- ▶ Summarizes all foreign transactions associated with current economic activity in Canada and involving Canadian dollars.
- ▶ Includes four types of transactions:
 - ▶ Trade in merchandise
 - ▶ Trade in services
 - ▶ Flows of investment income
 - ▶ Transfers

The Current Account

- ▶ A current account surplus
 - ▶ Account's receipts $>$ Payments
- ▶ A current account deficit
 - ▶ Payments $>$ Receipts

The Capital and Financial Accounts

- ▶ The capital account
 - ▶ Summarizes the transfer of ownership of savings and intangible assets.
- ▶ The financial account
 - ▶ Summarizes all foreign transactions of financial assets involving Canadian dollars, includes three types of transactions.

Financial Account Transactions

1. Portfolio investment does not give the buyer controlling interest.
2. Direct investment is financial investment that gives the buyer controlling interest.
3. Other financial investments are linked to day-to-day fluctuations in bank deposits.

Capital and Financial Accounts

- ▶ Surplus occurs when this accounts' receipts > payments
 - ▶ Canadians make less foreign investments than foreigners make in Canada.
- ▶ Deficit occurs when this account's payments > receipts
 - ▶ Canadians make more foreign investments than foreigners make in Canada.

Balance-of-Payments Surpluses and Deficits

- ▶ A balance-of-payments surplus is a positive net balance
 - ▶ Receipts > payments on the current account and capital and financial accounts combined.
- ▶ A balance-of-payments deficit is a negative balance
 - ▶ Payments > receipts on the current account and capital and financial accounts combined.

Changes in Official Reserves

- ▶ The change in official reserves:
 - ▶ Shows the effect of the Bank of Canada's buying and selling of foreign currency on the flow of Canadian dollars.
 - ▶ Equal in value (and opposite) to the surplus or deficit noted in the balance of payments.

Changes in Official Reserves

- ▶ A negative change in official reserves
 - ▶ Bank of Canada sold Canadian dollars (creating an outflow) by buying foreign currency.
- ▶ A positive change in official reserves
 - ▶ Bank of Canada bought Canadian dollars (creating an inflow) by selling foreign currency.

Exchange Rates

- ▶ The exchange rate is the value of one nation's currency in terms of another currency.
 - ▶ Two exchange rates can be used to compare any two currencies (e.g. the Canadian and U.S. dollars).
 - ▶ For example, Canadian dollars to buy US\$1 = (1/U.S. dollars to buy CDN\$1).

Exchange Rates and Prices

- ▶ The impact of exchange rates on prices can be illustrated using Canadian and U.S. dollars.
 - ▶ A product's U.S. dollar price = the Canadian dollar price x U.S. dollars to buy CDN\$1.00.
 - ▶ A product's Canadian dollar price = the U.S. dollar price x Canadian dollars to buy US\$1.00.

The Demand for Canadian Dollars

- ▶ The demand for Canadian dollars is the relationship between the price of a Canadian dollar and the quantity demanded in exchange for another currency (e.g. the U.S. dollar).
- ▶ The demand curve's negative slope is determined by foreign export buyers, since the higher Canadian \$ means that Americans find Canadian products more expensive and so they buy fewer of them.

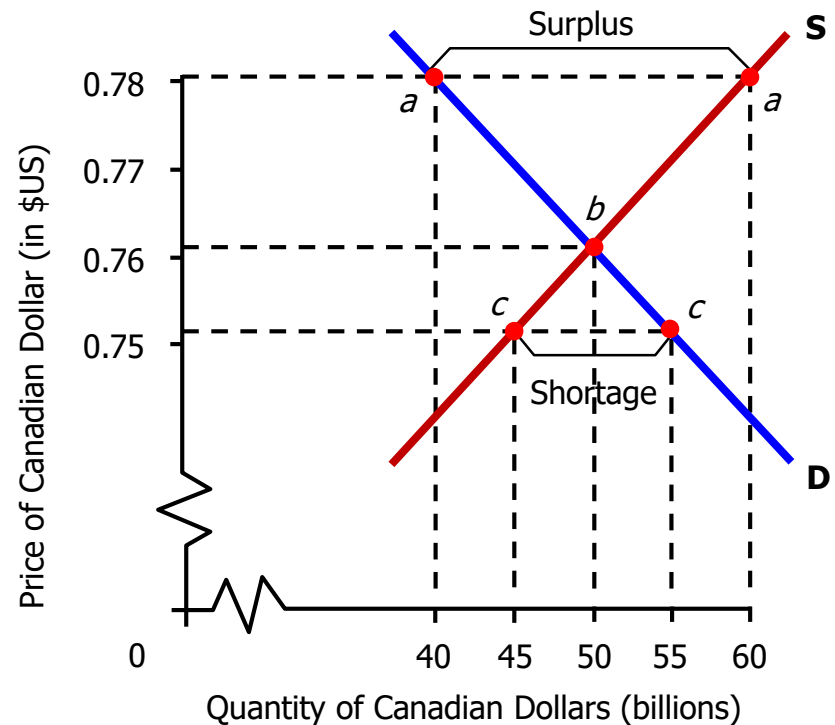
The Supply of Canadian Dollars

- ▶ The supply of Canadian dollars is the relationship between the price of a Canadian dollar and the quantity supplied in exchange for another currency (e.g. the U.S. dollar).
- ▶ The supply curve's positive slope is determined by Canadian import buyers, since a higher Canadian \$ means that Canadians find American products cheaper and so they buy more of them.

A Foreign Exchange Market

Canadian Dollar Demand and Supply Schedules

Price of Cdn. Dollar (in \$US)	Quantity of Cdn. Dollars Supplied (\$ billions)	Quantity of Cdn. Dollars Demanded (\$ billions)	(surplus (+) or shortage (-))
↓ US\$0.78	60	40	= +20 ↓
US\$0.76	50	50	= 0
↑ US\$0.75	45	55	= -10 ↑



Canadian Dollar Demand and Supply Curves

Appreciation and Depreciation

- ▶ When an exchange rate is allowed to vary, foreign exchange markets will reach equilibrium where demand and supply are equal.
- ▶ A currency appreciates when its price rises relative to the price of another currency.
- ▶ A currency depreciates when its price falls relative to the price of another currency.

Changes in Exchange Rates

- ▶ Four factors affect exchange rates:

1. Price differences

- ▶ A rise in A's prices relative to B's decreases demand and increases supply of A's currency and lowers its price in terms of B's currency (and vice versa).



2. Product demand

- ▶ A rise in demand for A's products increases demand and decreases supply of A's currency and raises its price in terms of other currencies (and vice versa).

Changes in Exchange Rates

3. Interest rates

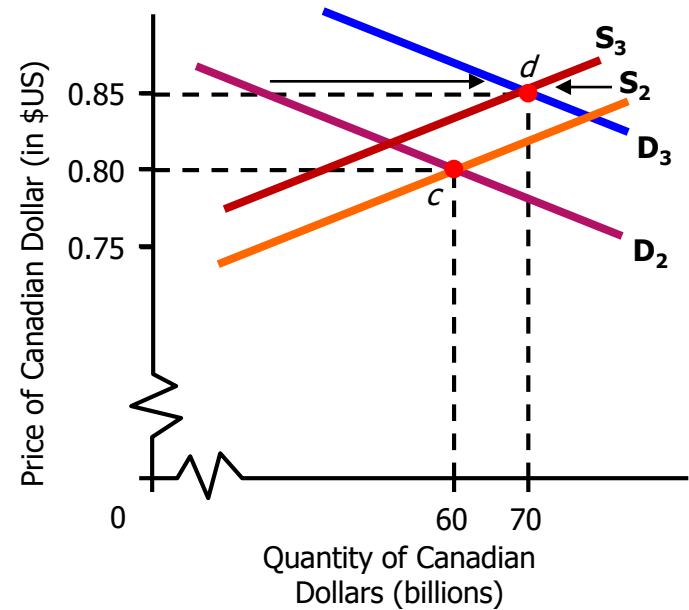
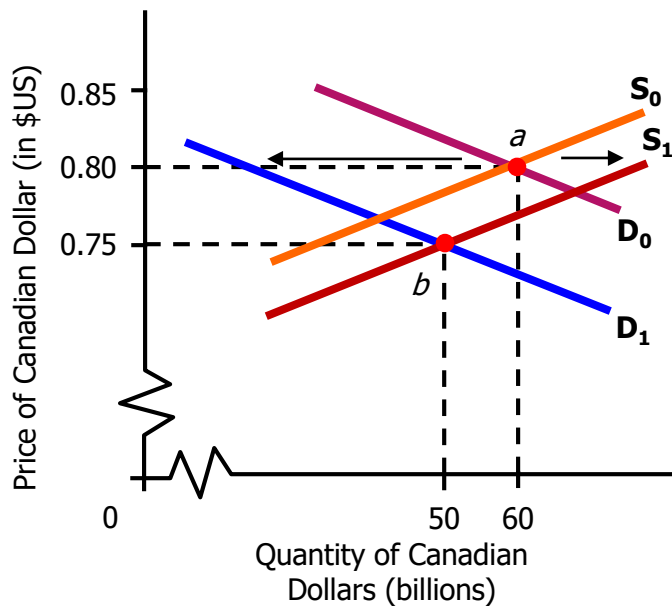
- ▶ A rise in A's interest rate relative to B's increases demand and decreases supply of A's currency, raising its price in terms of B's currency (and vice versa).



4. Speculation

- ▶ Signs that A's currency will increase relative to B's currency mean an immediate increase in demand and decrease in supply of A's currency and raise its price in terms of B's currency (and vice versa).

Exchange Rate Changes



Exchange Rate Systems

- ▶ Flexible exchange rates are allowed to move freely to their equilibrium levels.
- ▶ Fixed exchange rates are set or “pegged” to a certain value by each country’s government.
 - ▶ A target exchange rate below equilibrium creates an excess demand for the currency and a balance-of-payments surplus.
 - ▶ A target exchange rate above equilibrium creates an excess supply for the currency and a balance-of-payments deficit.

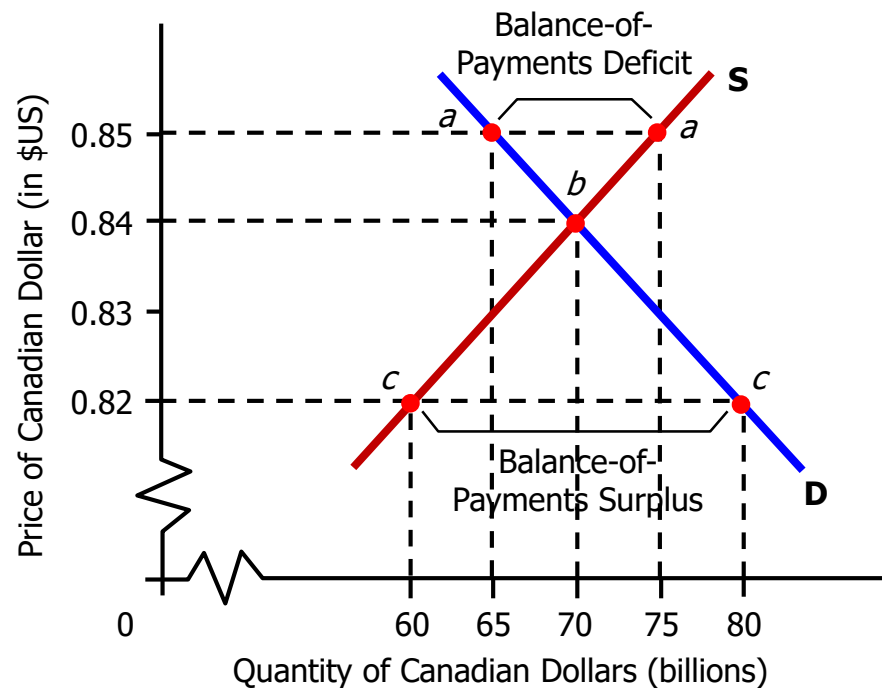
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- ▶ A low fixed exchange rate stimulates exports, but brings the danger of inflation.
 - ▶ A high fixed exchange rate puts downward pressure on inflation as well as on real output and employment.

Fixed Exchange Rates

Canadian Dollar Demand and Supply Schedules

Price of Canadian Dollar (in \$US)	Quantity Supplied (\$ billions)	Quantity Demanded (\$ billions)	(surplus (+) or shortage (-))
US\$0.85	65	75	+10
US\$0.84	70	70	0
US\$0.82	80	60	-20

US\$0.85 75 - 65 = +10
 US\$0.84 70 - 70 = 0
 US\$0.82 60 - 80 = -20



Canadian Dollar Demand and Supply Curves

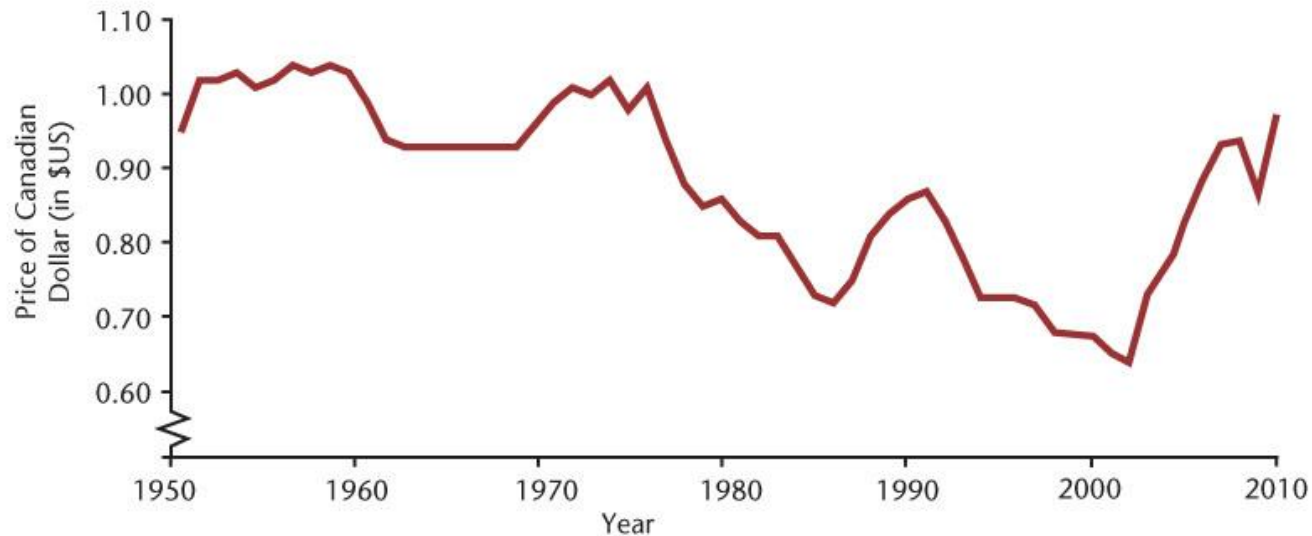
The Evolution of Exchange Rate Systems

- ▶ There have been three major exchange rate systems used by industrialized countries during the past century:
 1. The Gold Standard
 2. The Bretton Woods System
 3. The Managed Float

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1. The Gold Standard (1879-1934), which meant that each country set the value of its currency in terms of an amount of gold
 2. The Bretton Woods System (1945-1971), which was based on adjustable fixed exchange rates.
 3. The Managed Float (1971-the present), which is a flexible exchange rate system that sometimes involves short-term government intervention.

Canadian Exchange Rates

FIGURE 14.7 Canadian Exchange Rates



With floating rates, the Canadian dollar rose above US\$1 in the 1950s. Between 1962 and 1970, it remained at its fixed value of US\$0.925. With a managed float in place since 1970, the Canadian dollar has fluctuated widely.

Sources: Bank of Canada.